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NOVEMBER 1985

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YES THEY CAN!

Man of the Year Don Kuster (right) and his boss, vp Weldon Cole, shape distribution profits at Continental Can

ALSO:

Is Transportation Equipped for the Future?

VOL. 84, NO. 11

Chilton's

DISTRIBUTION

NOVEMBER 1985

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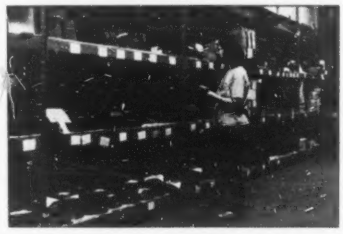

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It's seldom that we find all, or nearly all, of our readers in agreement on even the tamest of issues, but our Dialogue questions regarding the value of salary surveys reminded us that there are still many opinions which shippers all seem to have in common. The one voice with which readers shouted back their response to our August inquiry indicates the one thing shippers are looking for in salary surveys is more precision. Some want more precise definitions of various job titles. Some want more precise breakdowns by geographic region or by the size of the business. Yet others want job and educational experience, or the differences between industries taken into account. But whether they place more importance on the number of people a manager supervises, or the sales volume he or she handles, all readers are in agreement that salary surveys should "tell us more!"

"I'd like to see salaries broken down by industry, and also broken down for clerical and secretarial positions. Entry-level salaries would be useful too."**—Robert Prescott, manager of transportation services, Degussa Corp., Theodore, Ala.**

"I could use a survey which indicates salary structures geared to specific industries and one which fully explains the functions of each title."—**Jack Deckert, general traffic manager, W. A. Taylor & Co., Miami.**

"Traffic manager or distribution manager of what kind of operation? I'd like to see a description—domestic or international, regional or national, or both domestic and international. Do the people answering these surveys have products requiring one, or all modes of transportation?"**—S. F. Bray, worldwide distribution manager, RCA, Camden, N.J.**

"I want to see a survey of small warehouse managers—the ones that manage only two to four people, but have a lot of responsibility."**—Carl Overman, warehouse manager, Dolco Packaging Corp., Dallas.**

"Most surveys relate to large companies. What about those in the 250-1,000 employee range in various industries? Salaries won't be as high as those in major corporations, but just where do we fall in comparison?"—**James J. Paule, traffic manager, Spangler Candy Co., Bryan, Oh.**

"I would like to see average salary information for small, medium, and large companies, according to sales. Say under $20 million, $20-$100 million, and over $100 million in sales."**—Robert Poppelneiter, traffic manager, Gifford Hill American, Dallas.**

"I'd like to see: salaries by region to adjust for cost of living; salaries

continued

QUESTION OF THE MONTH

BROKERS: A GOOD BET?

The last time Dialogue asked about brokers, the broker boom was just starting, and reader feedback from the card clearly indicated that brokers still had much to do in the way of image projection. Now we seem to be at the peak of the broker craze; the fad appeal of brokering authority now seems to be on the wane, and what's left are those brokers who are serious about doing something with their ability to be a middleman.

The ones that were just dabbling and floundering in the field have fallen back from the pack; a hard core of pretty well established companies now remains. Furthermore, the leading brokering organization, the Transportation Brokers Conference of America, has thrown a great deal of effort into creating a code of ethics and a certification program for its members.

We're still hearing horror stories, though, about "take the money and run" outfits. As we get ready to put together another broker directory, to be published in our Janauary issue, we'd like to see if shippers' perceptions, and use, of brokers has changed. Are brokers to be vaunted, or still to be avoided. Let us know what you think by filling in the card below.

DIALOGUE

November 1985

- My use of property brokers to locate carriers and arrange transportation of my freight has: ________increased; ________decreased; ________not changed in the last two years.
- My current perception of brokers can best be summed up in this way: ________avoid them at all costs, ________they are a viable option only in emergencies and unique situations; ______they can be a viable option that can be part of my everyday distribution routine.
- I am ________impressed/________not impressed by the efforts of brokers to create higher qualifications and ethical standards within their ranks. I think it ________will/________will not lead to an improvement of the brokers' image and performance.
- If I need a broker, I locate one through: ________word-of-mouth; ________personal contact; ________Yellow Pages or other public directory; ________professional rosters; ________other (describe):________________________________

- My own company ________has/________has not made good use of its own brokering authority to locate backhauls either for our own private fleet or for the for-hire carriers we use.

Here's a brief summation of the extent of my personal dealings with property brokers:

NAME (print) TITLE

COMPANY PHONE

ADDRESS

CITY STATE ZIP

FIGURES IN SPEECH

(Quotes from transportation and distribution notables that have caught the ears of *DISTRIBUTION* editors:)

"Since the latter part of the fourth quarter last year, the economy has been soft in just about every category. It is just bewildering to me and others in the industry as to why economists have a hard time sorting out what is happening. They should just look at load figures of railroads and trucks."**—Harry J. Bruce, chairman, Illinois Central Gulf Railroad.**

•

"It is self-evident that a wealth of specialized expertise, experience, and, not least, foreign office networks are needed for the dispatch and shipping of freight throughout the world. It is therefore not enough [for an air forwarder] to pick up the merchandise promptly at the shipper's and to deliver it to the carrier. The decisive planning and organizational work must be undertaken before a shipment becomes 'air cargo,' especially as in many instances the airfreight charges are more than the value of the cargo."**—Herbert Braunagel, vice chairman, FIATA Airfreight Institute.**

by education; salary progressions—starting salary, at 5 years, 1o years, etc.; and perks, if any, and the salary equivalent."**—Ed Mulderick, warehouse/traffic manager, Westvaco, New Orleans.**

"Average salaries should be broken down by region or based upon the degree of job responsibility."**—Marsha Branson, traffic manager, California Cooler, Inc., Stockton, Calif.**

"I'd like to see a salary listing of traffic and distribution management from a cross section of industries."**—Karl H. Meyer, physical distribution manager, Barth & Dreyfuss, Los Angeles.**

"Since my company is small, I wear many hats. Therefore, the title of distribution manager includes responsibilities in all of the areas mentioned in these surveys. I'd like to see something on the salaries of people in similar situations."**—Unsigned.**

"The size of the organization has to be given more consideration. What a traffic manager is in one company may be just a clerical function in another."**—Unsigned.**

"I need a better description of the jobs being rated. What functions do these people really perform? Job titles are becoming less and less useful in this field."**—Unsigned.**

BRINGING HOME THE BACON

I use salary studies to determine salaries of the people I manage	39%
I don't use salary studies	41%
I use salary studies when negotiating my own salary	43%
I don't use salary studies	41%
The "average" salaries I've seen published are too high	18%
too low	20%
about right	57%
I think my own salary is above average	9%
below average	53%
average	31%
Reader estimates of average salaries for the following job titles (mean/median):	
Rate analyst	$24,000/$20,000
Warehouse manager	$31,000/$34,000
Inventory control manager	$34,000/$35,000
Private fleet manager	$35,000/$35,000
Traffic manager	$35,000/$37,000
Distribution manager	$40,000/$37,000
Distribution vp	$56,000/$65,000

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CAREERS

WHERE DO YOU FIT IN ?

For the fourteenth time, the Logistics Research Group of The Ohio State University has provided the benchmarks that let you know just where you stand among your peers

By Bernard J. LaLonde, Ph.D
and Larry W. Emmelhainz

AVERAGE COMPENSATION 1985

	Manager	Director	Vice President
Top Quarter	$63,730	$101,640	$140,080
Second Quarter	$56,300	$76,870	$117,170
Third Quarter	$46,730	$65,200	$95,330
Lowest Quarter	$35,270	$51,200	$84,170
High	$28,000	$22,000	$50,000
Low	$125,000	$132,000	$205,000
Average	$55,520	$72,410	$106,440

CHANGES IN COMPENSATION 1985 OVER 1984

PERCENT CHANGE	PERCENT
Lower than 1684	0.0%
No Change	0.7%
2-4% increase	3.9%
5-6% increase	20.4%
7-8% increase	31.6%
9-10% increase	23.0%
11-15% increase	11.2%
Over 15% increase	9.2%
Average	9.7%

AVERAGE COMPENSATION

Compensation for each of the three levels of executives increased on the average, with the manager category increasing the least. Unlike the previous two years, where 10 percent of the executives reported either no change in pay over the previous year or a decrease, none of the 1985 respondents reported a decrease in salary and only one executive reported no change. Over 50 percent of the executives received an increase of from 7 to 10 percent, with the average pay raise being 9.7 percent.

Our analysis also showed that pay was positively correlated with years in the job, years working for the present employer, job title, and the size of the executive's budget responsibility. Change in pay, however, was inversely correlated with years on the job, years with the present employer, and age. Change in pay was positively correlated with the level of education, but was not correlated at all with the level of budget responsibility. These relationships suggest that the highest levels of pay go to those executives who have been with the same firm for some time and have assumed large levels of responsibilities both in terms of budget and job title. The largest increases in pay, however, were generally obtained by those people who had moved into their present job within the last few years, were younger, and had higher levels of education.

ABOUT THE AUTHORS

Dr. LaLonde is Mason Professor of Transportation and Logistics, and Larry W. Emmelhainz is a major in the Air Force and a research associate. Both work at The Ohio State University.

The authors wish to acknowledge the Logistics Research Fund of The Ohio State University, which provided financial support for this project.

This marks the fourteenth consecutive year that the Logistics Research Group at The Ohio State University has surveyed logistics executives with the intent of better understanding their career patterns. From its inception in 1972, the survey has continued to identify specific information relative to the executives' education, compensation, work experience, and general demographics. It has been expanded to include questions which probe the attitudes of logistics executives toward current issues as well as future aspects of the logistics environment.

The 1985 survey was specifically designed to better understand:

1. The organization of the logis-

continued on p. 34

LOGISTICS ACTIVITIES TIME AND FUNCTION 1985

	MANAGERS		DIRECTORS		VICE PRESIDENTS	
	AVERAGE TIME SPENT (%)	CONSIDERED A LOGISTICS FUNCTION (% YES)	AVERAGE TIME SPENT (%)	CONSIDERED A LOGISTICS FUNCTION (% YES)	AVERAGE TIME SPENT (%)	CONSIDERED A LOGISTICS FUNCTION (% YES)
Traffic	17.3	93.0	14.2	97.0	13.5	100.0
Warehousing	18.0	93.0	13.8	95.0	13.9	96.0
Inventory	5.7	67.0	8.5	81.0	7.4	77.0
Order Entry/Processing	5.5	42.0	4.8	67.0	5.0	80.0
International	5.8	88.0	4.6	74.0	2.1	45.0
General Administration	15.8	73.0	21.3	81.0	23.4	87.0
Procurement	1.9	29.0	3.6	44.0	6.8	45.0
Packaging	1.2	34.0	1.9	37.0	1.9	34.0
Strategic Planning	6.8	64.0	5.1	61.0	5.1	79.0
Sales Forecasting	1.8	16.0	1.6	38.0	1.3	34.0
Budgeting	4.1	81.0	4.9	81.0	3.8	79.0
Product Planning	1.2	19.0	1.2	26.0	0.6	18.0
Other Logistics	3.9	96.0	4.1	94.0	4.6	90.0
Interacting with Other Functions	11.0	83.0	10.4	88.0	10.6	92.0
	100.0%		100.0%		100.0%	

TIME DEMANDS

This year's questionnaire was again designed to determine the percentage of the executive's time spent performing various logistics activities. Directors and vice presidents spend more time in general management and administration than in any other single activity. Managers spend less time in general administration, but these responsibilities still require an average of nearly 16 percent of their time. Traffic and warehousing consume the most of the traditional logistics activities, ranging from 35 percent for managers to about 28 percent for directors and vice presidents. Regardless of job title, logistics executives spend over 10 percent of their time interacting with other functional areas, confirming that the integrative nature of logistics necessitates coordination throughout the firm.

In addition to asking executives the amount of time they spend in these various activities, executives were asked to indicate whether or not each activity was considered a logistics function in their firm. Three interesting observations can be made from the responses provided.

First, there is very little that all logistics executives agree upon. In only one instance did one of the three groups (vice presidents) agree 100 percent that an activity (traffic) was considered a logistics function in their firm.

Second, in two instances there was a significant difference between managerial levels as to whether the activity was considered a logistics function by the firm or not. Vice presidents and directors were in much stronger agreement than managers that order entry and processing was a logistics function in their firm. In addition, managers and directors were in much closer agreement than vice presidents relative to whether international was a logistics function.

Third, using a 50 percent agreement as a standard as to whether an activity is a logistics function or not, four of the activities included in the questionnaire were not considered logistics functions. These four were procurement, packaging, sales forecasting, and product planning.

tics function;

2. The responsibilities of top logistics executives;
3. The demographic characteristics of those executives;
4. A future perspective.

To meet these goals a four-page questionnaire was designed and mailed at the end of July, 1985 to 719 members of the National Council of Physical Distribution Management (NCPDM) and other industry executives identified from supplementary mailing lists or rosters. To be sure that the questionnaire represented perceptions of top logistics executives, the questionnaire was mailed to the individual with the highest perceived position if there were two executives with the same firm in the sample. Responses from people who did not appear to have a senior executive logistics position were deleted from the database. The responses which were usable represented 161 executives, a 22.4 percent response rate, and form the basis for this article. These responses are from 94 different three-digit Zip codes and include concentrations of responses from the food, chemical and plastics, and pharmaceutical and health care industries.

While the intent was to obtain the perspectives of the highest ranking logistics executives, these people seldom have as their job title, "top executive." Generally, the executives responding to our

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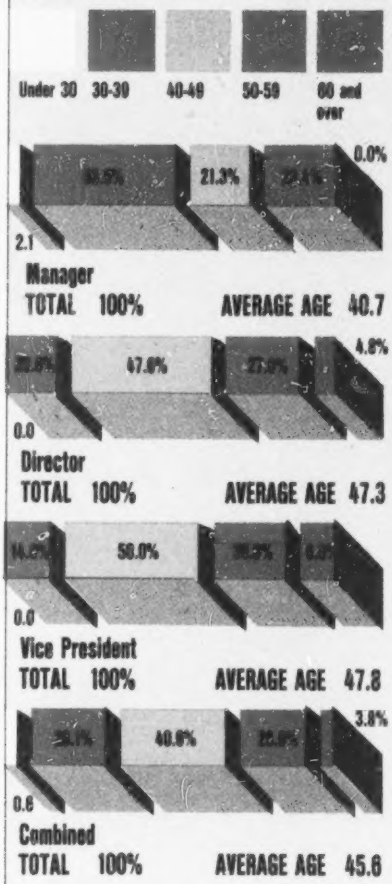
AGE DISTRIBUTION 1985



EDUCATIONAL BACKGROUND 1985

Level	Percent
High School Graduate	2.0%
College, non-degree	5.2%
College Graduate	41.2 %
Graduate School, non-degree	9.1%
Master's Degree	41.2%
Doctorate	1.3%

UNDERGRADUATE DEGREE MAJOR 1985

Level	Percent
Business Administration	21.3%
Engineering and Sciences	13.2%
Transportation	12.5%
Liberal Arts	8.1%
Industrial Engineering/ Management	10.3%
Economics	8.7%
Marketing	5.4%
Other	20.5%
TOTAL	100%

EXECUTIVE CHARACTERISTICS

This year's respondents continue to be relatively young. The overall average was 46, with the youngest (a manager) 29 and the oldest (a vice president) 65. As was first seen last year, most vice presidents and directors are in the 40-49 age group. The average age for both of these groups is about 47 years. Managers were predominantly aged 30-39, with an average age of just under 41 years old.

Over 98 percent of the executives have some college, and as was the case last year, 93 percent are college graduates. These degrees are from a variety of academic areas, just as has previously been the case. The only significant change appears to be a decline from 22 percent to 13 percent in degrees from engineering and sciences.

EDUCATIONAL NEEDS 1985

Area	First Choice	Second Choice
Finance, Accounting	22.4%	20.8%
Computers, Information Processing, Modeling with Micros	31.3%	17.5%
General Management. Strategic Planning	9.7%	10.8%
Marketing	3.0%	7.5%
Personnel, Organizational Behavior, Humanities	8.2%	10.8%
Logistics, Transportation	14.9%	18.3%
Other	10.5%	14.3%

EDUCATIONAL NEEDS

Considering the changes logistics executives anticipate, there is some logical rationale for the subjects the executives consider important to their own self development. These are subjects they would take if given three months leave of absence to study any subject area they wished. Most executives felt they needed more knowledge in the use of computers. This included modeling with microcomputers and better information processing. Formal financial education failed to be the most frequently mentioned subject for only the second time in the 14-year history of this research. This has been caused more by the greater acceptability of computers into logistics and the growing recognition by logistics executives of the need to obtain increased competence in this subject area than by any decrease in the need for financial education. The proportion of executives indicating a need to study logistics topics increased from 5 percent to 15 percent as a first choice and from 5 percent to 18 percent as a second choice.

MAJOR FACTORS EXPECTED TO INFLUENCE THE GROWTH OF THE CORPORATE LOGISTICS FUNCTION DURING THE NEXT DECADE 1985

FACTOR	MOST IMPORTANT	2nd MOST IMPORTANT
Computers, Communication	16.3%	22.7%
Costs (includes transportation)	15.0%	19.9%
Customer Service Demands	10.9%	10.6%
Inventory Management, J.I.T.	12.2%	4.3%
Top Management Awareness	8.8%	7.8%
Transportation/Deregulation	6.1%	7.8%
Increased Productivity	8.2%	6.4%
Competing in Marketplace	8.9%	5.0%
Growth/Decline of Business	8.2%	3.5%
International Business	2.7%	2.8%
Economic Factors	0.7%	2.8%
Other	2.0%	6.4%

PROJECTED CHANGE IN TOTAL LOGISTICS COSTS 1986 OVER 1985

INCREASE OR DECREASE	RESPONDENTS
Over 8% increase	14.9%
8%	3.3%
7%	3.3%
6%	7.4%
5%	22.3%
4%	19.0%
3%	9.9%
2%	5.8%
1%	1.7%
0%	6.6%
Decrease over 1985	5.8%
Average Change	6.0%

FUTURE EXPECTATIONS

Executives identified numerous factors which they felt would influence the growth of the corporate logistics function during the next decade. The ability to adapt computers and communication technology to better manage information for decision-making leads the list of factors considered most important. The second most frequently mentioned factor was the ability to control or reduce costs in order to generate profits.

Many executives identified specific logistics functions as becoming the most influential over the next ten years. These included being able to respond to customer demand for better and more consistent service; management expecting lower inventories, perhaps through implementing just-in-time concepts; and continuing to meet the opportunities or problems generated as the result of transportation deregulation.

It is interesting to consider the executives' projections of logistics costs in 1986 over 1985 since the executives expect logistics costs to play such a dominant role in the future. Generally, the executives surveyed anticipated relative stability in their logistics costs. Total logistics costs were expected to increase by 6 percent in 1986 budget projections compared to the costs experienced for 1985. That average may be misleading, however. Over 71 percent of the executives expect costs to change by less than a 6 percent increase. Fifty-one percent expect costs to increase by 3 percent to 5 percent, and 12 percent expect costs to either decline or to remain unchanged in 1986.

---

survey can be classified as manager, director, or vice president. Although there are other titles used, these categories have facilitated the broad trend analysis over the years.

The reader is cautioned to keep in mind that the responses to this survey continue to be anonymous. Thus, year-to-year comparisons may not be from the same group of executives and differences may represent random occurrences. The large number of responses each year, however, and the year-to-year consistency of the database suggest an adequate basis for projecting long-term trends.

There appear to some fundamental changes that this year's survey confirms as continuing to impact the logistics function.

- The first trend which was identified three years ago is a recognition of the impact of technology in general and information in particular on the role of the logistics function in the firm. The impact of this trend is made more complex by the speed with which new technology is being developed and applied.
- A second important and continuing trend that the current survey found evidence to support is the trend towards logistics integration. Both in terms of functional responsibility and reporting relationships, the logistics responsibility is broadening to map the materials flow process. Organizational formats are being developed which are breeching the traditional barriers of production and procurement.
- The third trend is in the positioning of the logistics function. Over the 14 years of the annual survey, the logistics function has clearly been repositioned in many firms. This conclusion regarding repositioning stems from a number of different pieces of evidence. First, the number of vice presidents and directors as a percent of total respondents has increased substantially over the past five years. Second, the average salary data strongly suggest a repositioning of the logistics function in many firms. Third, the functional responsibility of the logistics executive supports a broadened view of the logistics function in the firm.

An underlying thread of the survey results during the past several years is the speed with which change is occurring in the logistics function. The logistics executive can no longer sit patiently on the sidelines and wait for the game to develop before executing the logistics plan. In many firms, the logistics manager is on the first team and must be in the game from the time the whistle blows.

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DECEMBER 1985

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FOR TRAFFIC & TRANSPORTATION DECISION MAKERS

RESHAPING WAREHOUSE STRATEGIES

Green Giant

EUROPE BY THE CONTAINER • DRUGSTORE DISTRIBUTION WARS • ICC UNDER SIEGE

VOL. 84, NO. 12

Chilton's
DISTRIBUTION

DECEMBER 1985

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Can Joe's Drugs possibly hope to survive the onslaught of superstores? Armed with enough distribution power, Joe and his fellow Moms and Pops may have a fighting chance.

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44 NO FEAR OF THE FREE MARKET
Japan is undergoing an NVO boom, sparked by the U.S. Shipping Act, that shows that the Japanese have the savvy to compete.

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Shippers pushing for complete trucking deregulation and ICC sunset had better be well armed for a fight they will now have to wage alone.

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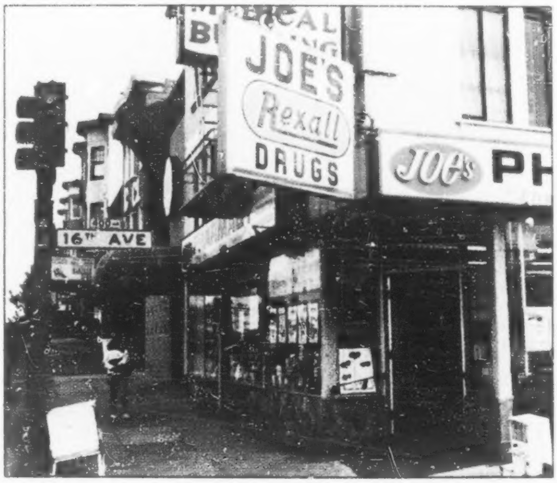

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More Equipment

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Our September Dialogue Card asked our readers to tell us what they think of carrier sales reps. *Their responses to our inquiry of how they select which reps they will see indicates that most shippers fall into one of three camps: those that divide their time among those reps who are qualified, considerate, and well informed; those who only see salespeople who represent carriers with a good reputation for service or price; and those shippers who find time to see them all. But even shippers bivouacked in the last camp seem to have minimal expectations from the carrier representatives they deal with. Among these are a familiarity with the shipper's needs, and a readiness to both give and take information.*

"I try to see every carrier that wants to see me at least once. After the first time, I decide if another meeting is necessary."**—David Ready, traffic manager, Easco/KD Tools, Hanover, Md.**

"Carrier reps must have knowledge of my traffic in terms of service and competition. Cost is of prime concern. Those who are willing to do their homework will succeed here; otherwise don't bother me."**—James J. Paule, traffic manager, Spangler Candy Co., Bryan, Oh.**

"If reps take the time to come in our front door, we will see them, if only for a few minutes."**—Linda M. Missig, traffic coordinator, Imperial Clevite, Milan, Oh.**

"I screen reps on the basis of need, and on their total distribution approach. Once in a while, I'll see one out of curiosity."**—Earl J. Kangas, distribution manager, Peterson Publishing Co., Los Angeles.**

"I'll see a carrier rep if it's either a brand-new carrier, or one that we use heavily."**—S. L. Silverstein, logistics manager, Guardian Division, Cooper, Brighton, Mass.**

"They must be LTL carriers. I will schedule interviews two times. Rates and discounts are nice, but good to excellent service is what I'm looking for."**—Carolyn H. Jensen, shipping coordinator, NSK Corp., Bearing Division, Ann Arbor, Mich.**

"I only want to talk with those carrier reps who want to work with shippers in order to have their company become a partner in the movement of goods, in the most expeditious and economical fashion."**—Philip N. McClain, corporate traffic manager, Dynersburg Fabrics, Inc., Dynersburg, Tenn.**

"I only rule out the carriers I *know* cannot help us. I see all others on the chance of something new arising."**—Rick L. Dugan, traffic analyst, Louisville Cement Co., Louisville, Ky.**

continued

QUESTION OF THE MONTH

MEETING YOUR NEEDS?

Another exhaustive season of industry meetings, conventions, seminars and the like is gasping to a close, leaving behind some questions as to whether the content of these sessions filled the bill, or whether they left you feeling empty.

We've asked you to rate the trade associations before, but this month we want to zero in on the meetings held by these groups. While it's all still fresh in your minds, we'd like to get some feedback as to which meetings yielded some tangible benefits for you this fall, and which just yielded painful expense reports.

Do you find these meetings to be representative of your current management needs, or do you think they tend to center too much around either nebulous new buzztopics of questionable merit, or the musty old standbys? Are they dominated by too few members of the various industry populaces, or by industry giants whose insight has little application in the operations of more modest sized attendees?

What makes one meeting useful, and another one useless? Our "evaluation form" is below—and it's a lot easier to fill out than those cumbersome ones they always ask you to grapple with at the meetings themselves:

DIALOGUE

December 1985

- This fall, I attended the following meetings (check all that apply): ________NCPDM; ________NASSTRAC; ________NITL; ________APICS; ________ATA; ________AAPA; ________TRF; ________AST&L; ________TDCC; ________TCI; ________DNA; ________local chapter meeting(s) of transportation group(s) ________other(s) (list them here:) ________________
- Of the meetings I attended, the one of the most practical value was: ________________
- The meeting that I considered the biggest waste of time was: ________________
- Here's what will attract me to a meeting (check all that apply): ________session topics; ________concurrent exposition; ________speakers; ________meeting location; ________meeting "theme"; ________membership of group holding meeting; ________other (describe:) ________________
- Here's what will turn me off most quickly about a meeting: ________session topics I've heard before; ________"speakers" who are likely to give commercials; ________excessive time devoted to cocktail parties and/or recreation; ________resort-type location; ________concurrent exposition; ________other (describe:) ________________
- My management does/does not expect me to justify attendance at meetings by showing specific cost savings.

Describe your best example of an instance where you went to an industry meeting and came back with something tangible that you could apply to your own distribution operation. Please be specific:

NAME (print) TITLE

COMPANY PHONE

ADDRESS

CITY STATE ZIP

FIGURES IN SPEECH

(Quotes from transportation and distribution notables that have caught the ears of *DISTRIBUTION* editors:)

"Microcomputers in traffic are the way of the future. These things are great."—**Jim Moore, Logistics Resource, Inc., at the NCPDM (now CLM) annual meeting in St. Louis.**

•

"The future role of the personal computer in distribution will diminish except as a terminal and external processor."—**Robert J. Quinn, Associate, Temple, Barker and Sloane, Inc.**

•

"We hope to get relief from single-source leasing under the 30-day rule, which the Interstate Commerce Commission says is needed to differentiate private carriers from common carriers. No state allows single-source leasing. We run one way intrastate and a different setup on the interstate system. We can't use the same equipment and drivers. This is not cost-effective; it frustrates us."—**Herman Granberry, director of transportation, West Point Pepperell.**

"I will see reps who 'soft sell' and build a rapport that stimulates confidence that any problems can be resolved."—**Guy Russo, executive vice president, Nippon Industries, New York.**

"Before I see a rep, I review the carrier's sales brochures, their certificates of insurance and authority, their financial statements, their rates, and their area of service."—**Joseph Baron, manager of logistics, Meredith/Burda, Lynchburg, Va.**

"I do not see any reps making cold calls. When I require assistance, I will call and make an appointment."—**Abraham J. Melzer, logistics manager, Telentry Systems, Inc., Stamford, Conn.**

"Service over price gets our business. I see all reps; it's the only way to get up-to-date information."—**Peter Barson, traffic manager, Chemical Adhesives, Aurora, Oh.**

"I see reps if I like them and their company. They must offer good rates. New ones have a hard time getting to see me. Seeing them at traffic functions helps their case."—**Darlene M. Schadle, traffic manager, W. J. Ruscoe, Co. Akron, Oh.**

"I'll talk to a rep if I am having service trouble into the area where that particular carrier serves, and I haven't used that carrier yet."—**M. A. DiFronzo, traffic supervisor, Taylor Publishing Co., Malvern, Pa.**

"I see carrier reps by appointment only. I prescreen them for their knowledge of our operation and ask them up front what they can offer that's better than what we're getting now."—**Paul Weber, national physical distribution manager, Agfa Gevaert, Inc., Teterboro, N.J.**

CARRIER REP-UTATIONS

Carrier reps think the best way to make a sale is through:	
low rates	48%
service	18%
reputation	9%
Salespeople are interested in my requirements	69%
disagree	30%
Carrier reps are good at following up on complaints	63%
disagree	38%
Most reps are adequately trained	48%
disagree	51%
Most reps are too aggressive	38%
disagree	61%
Everything else being equal, shippers will give their business to whom they like	78%

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DISTRIBUTION

Editor-In-Chief
Chilton Co.
Radnor, PA 19089

WAREHOUSING

RESHAPING WAREHOUSE STRATEGIES

Our survey said: Traditional approaches to field inventory are being abandoned in favor of consolidations, direct shipping and a host of other plans.

**By Denis J. Davis, Senior Associate Editor
and Cathy Coffman, Special Projects Editor**

The message from our survey of distribution strategies (May, p. 94) was clear: Warehousing's traditional role is being challenged.

As the charts on the following pages clearly show, where inventory once served as a cushion for sales and customer service, high carrying costs are now giving distribution the leverage to strip stocks to leaner levels.

After tabulating our results, we went back to ask shippers just what strategies they're using. They opened a bag of simple nuts-and-bolts plans that aren't hard to implement. Aren't hard, that is, once the distribution department has the leverage of its first success to offer to sales and marketing for support.

Breaking Down Barriers

"I'm in the process of quantifying the benefits from a new pooling arrangement," says Leon "Bud" Cohan, distribution manager for T. Marzetti Co., a manufacturer of salad dressings and dips in Columbus, Oh. "But first I had to fight our customer service and sales departments.

"We sell through a food broker network," Cohan explains. "Every broker wants a public warehouse across the street from his office, and sales doesn't like to say no to anybody," he wryly observes. As a result, Marzetti got into a lot of warehouses without a lot of thought, Cohan points out.

"For this company, being in a public warehouse is not a desirable method of distribution, because we can't stock the whole product line," he asserts. The short shelf life for many of Marzetti's products also makes them difficult to warehouse.

But, Cohan says, to change any of that, he has to justify those changes.

Howard Weisz, the manager of material flow systems and warehousing for Scott Paper, has justified his share of changes. For example, when sales controlled some of the 22 public warehouses Scott was using, each district sales manager would keep a cache of product to cover that district's customers. The reason, Weisz explains, was that most of these district managers didn't think distribution could cover them in a crunch. To change that perception, Weisz developed a new standard, and he's stuck to it.

"I told them I could get an emergency truckload of product anywhere in the country within 24 hours. In fact, there are markets I can get to in six hours," he says.

In another example is the case of two warehouses in California. The company was shipping about 250 full truckloads of "emergency" shipments every month. But as Weisz points out, shipping that many trucks isn't emergency business—it's how you go to market everyday. The warehousing needed to respond to "emergencies" was adding about a dollar a case to Scott's costs, or about $500 a truck.

In addition, deregulation makes shipping from manufacturing sites more economical. Weisz says Scott has gone to different regions of the country and told customers that if they can fill one-third of a truck, it is more economical to ship from a manufacturing site than to take it to a field warehouse. Of course, he explains, the farther away from the manufacturing site, the higher the percentage of the truck that needs to be filled. "But there are places

continued

where we will take a 48-foot trailer, fill one third of it and send it out at a truckload rate," he reports.

According to Weisz, these direct shipments are resulting in significant savings, and both sales and marketing see them.

"We just had funds approved to double the size of a warehouse at a manufacturing site," he reports. But to accomplish that, Weisz went to the regional sales manager, pointed to the warehouses, to the throughput, to what it was all costing, and to the order profile. He then pointed out that, assuming the same profile, channels and products, Scott could do all of the shipping right from a manufacturing point.

By the Numbers

Most of us complain about accountants, but there are times when the numbers themselves provide the leverage for change. Randy Moberg, manager of national warehouse operations at American Hoechst Corp. in Bridgewater, N.J. says the company is very much stretched when trying to respond to service increases and, at the same time, reduce inventory and locations.

"We are doing it, quite honestly, in terms of dollars," he says. "When interest rates were 21 percent, inventory carrying costs got a lot of attention from top management, because costs started to go through the roof."

Then there are times when the impetus for change might be nothing more than a conversation during a game of golf. After they exchange broker tips, one chief executive turns to another and asks: "Are you doing anything with just-in-time (JIT)?"

For James M. (Mike) Starling, manager of distribution planning and development at ICI Americas, Inc., the initial challenge was just that. First management asked: are we doing any just-in-time? And, if we are not, do we have the potential to do it?

Okay, Now What?

For Starling, it became a three-phase project. The first part was finding where the company stood in relation to JIT. He found one program where ICI was delivering bulk sorbitol to Warner Lambert in Chicago.

"They came to us and said they wanted to implement a no-inventory situation in their plant, and that they wanted it on-call to feed their production line.

"To meet that," Starling reports, "we set up a warehouse close to their plant. We set up a grocery store-like operation where they call up in the morning, tell us what they want and then come over and pick it up to meet their production needs for the day.

"The tradeoff was that while we held the inventory, we also became their sole supplier."

Phase two for Starling calls for him to go through and identify the potential for other just-in-time opportunities in the company's eight or nine business groups.

"We do a lot of warehousing," he asserts. "We use between 50 and 60 public warehouses around the country, and that is a sizable network.

"JIT and other developments are recent," he notes, "but our network has been in place for about five years. Given the fact that buyers are now saying they want to reduce inventories and are looking at JIT concepts for their own production lines, we have to look to see if we are positioned to handle that."

There will be a reevaluation of the network, he adds, because he is not sure the company needs all of those warehouses, or if it is positioned in the right places for what the buyers are asking for.

Simply Cheaper

Where ICI is considering a realignment, Scott Paper has already gone through a reduction of the number of public warehouses it uses. The simplest and best reason for dropping field warehousing, says Scott's Howard Weisz, is that it is cheaper to ship direct.

"In trying to figure out a better way to handle our LTL, we saw three things," Weisz explains. "First, we recognized that for some LTL shipments we would need field warehouses."

Secondly, the paper company

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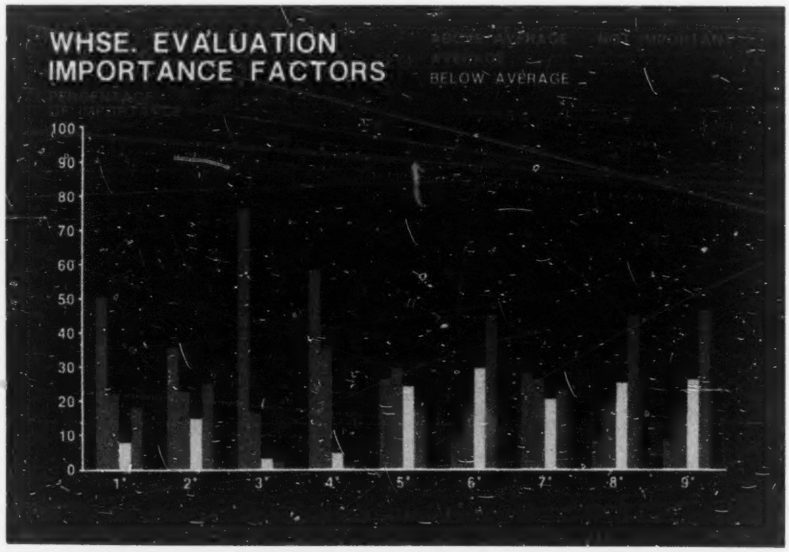
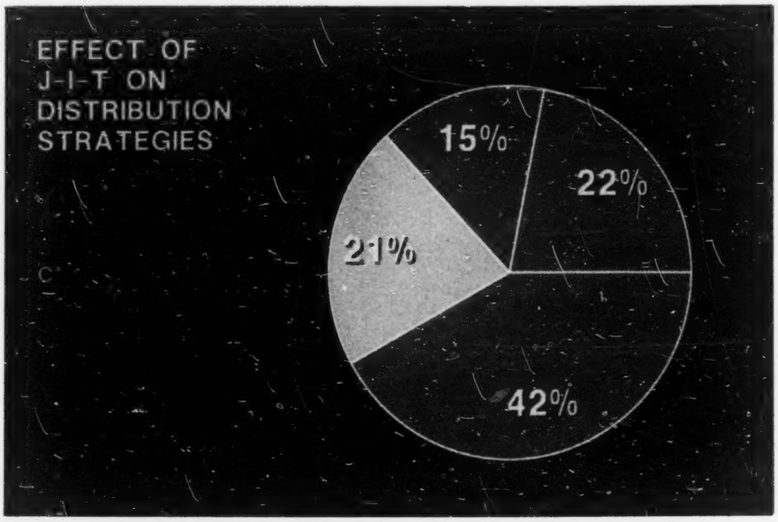
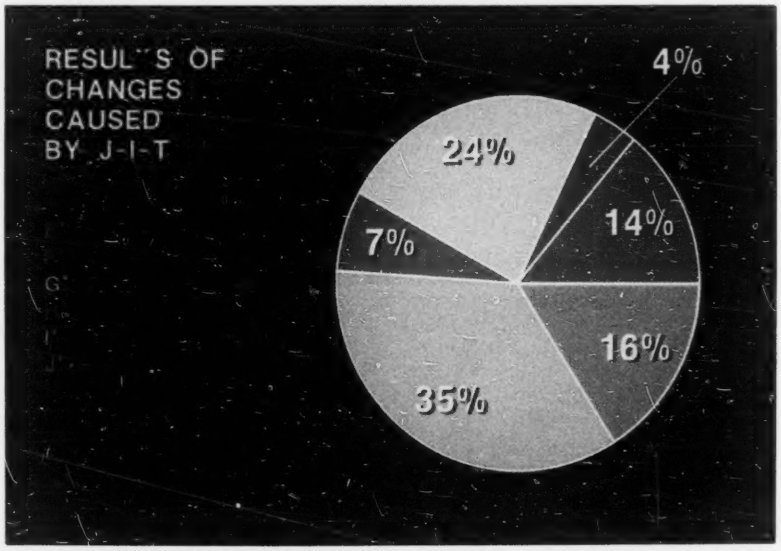


***Respondents to our survey on distribution strategies were asked to weigh the effect that several logistics variables have on their overall warehousing needs. The variables include: 1) Flow of materials to the production line; 2) Increased seasonal demand; 3) Delivery time to the customers; 4) Transportation costs; 5) Interest rates; 6) Overflow from other facilities; 7) New product introductions; 8) In-transit storage; and 9) Dead storage. The results make it clear that for shippers employing warehousing on either a public or private basis, customer delivery time remains the most important factor affecting their strategies. Transportation costs is the next most important variable. Putting the two together still gives us a picture of shippers who want to get the goods in and out of the warehouse on time, at reasonable costs.**



***We asked respondents to describe how inventory-reduction strategies like just-in-time are affecting their warehousing strategies. Is JIT, we asked: A) reducing inventory in all field warehouses, regardless of the effect on customer service? B) reducing the number of private warehouses, but increasing public warehouse use to keep customer service up to par? C) reducing the number of public warehouses by consolidating inventory in fewer facilities, but maintaining similar total inventory levels? or D) replacing field warehouse inventories with consolidation plans and direct shipments? Forty-two percent of the queried shippers observed that the just-in-time concept is replacing field warehouses with consolidation plans.**



***Some respondents have changed distribution strategies to meet the demands of the shift to just-in-time manufacturing. We asked whether the new strategies have led to: E) Reduced customer service with no impact on sales; F) Reduced customer service with an erosion of sales; G) Lower warehousing costs and acceptable increases in transportation costs; H) Lower warehousing costs but unacceptable increases in transportation costs; I) Lower inventory levels, faster turns, greater profit, and little change in sales; or J) Poorer coordination of inventory with sales and little savings in total costs. The results show that 35 percent of those shippers now immersed in just-in-time are improving profit margins as a result of inventory savings.**

saw it was doing a lot of promotional business with the big retail chains. And with that came the realization that these chains were buying promotional products only. After the incremental cost of putting these products through smaller warehouses via LTL, the company wasn't making any money on the promotional pieces.

The third thing that was rethought, according to Weisz, was supplying military PXs from these field warehouses.

"Rather than send a Scott salesman into the commissary system, we realized it would be a lot more economical for us to go through a wholesale grocer and, when he went to sell soup and cereal, he could also sell paper."

After Scott got the PX question and the non-food business sorted out, the company looked at just what kind of LTL business it was actually doing. Weisz says he realized that a lot of those shipments were 100 cases plus, and that a truckload is about 500 cases. With deregulation just coming about and the company just getting into contracts, Scott's distribution people realized that the company was better off shipping from a production site. They found that paying stop-offs when a carrier made four more stops was still more economical than going through a field warehouse.

In The Pool

"My goal is to get out of storage in public warehousing and go to straight pool distribution," Bud Cohan states flatly.

"I'm just coming to that point," he says. "Where I have done studies, I've found pool warehouses are faster and cheaper. Our orders are picked, packed and stretch-wrapped at our plant. We then get a truckload rate from here in Columbus to a public warehouse in Kansas City, but no storage is involved. We're charged for handling and cartage."

Cohan is looking to get out of all public warehousing for two reasons. The inventory is one, and franchise taxes is another.

Because of its success in Kansas City, Marzetti is doing the same thing in Chicago and in Michigan.

"Frankly, I think we can do just as well on the East Coast with pool shipments or direct ships from our plants in Columbus, Oh. and Atlanta," Cohan allows.

While Cohan argues that the expense of stocking Marzetti's entire product line in public warehousing cannot be justified, he admits there are some places where a public warehouse is needed. For Marzetti, New York City is one place. Problems are horrendous in the Big Apple, he says, and some local warehouser can better handle those problems.

Marzetti makes deliveries using its own fleet, and via common carriers; from pool warehouses, and from storage in public warehouses. But Cohan says he needs more goods in the pool warehouses for consolidations. "If I stored finished product here in Columbus instead of in the public warehouse in Chicago, I could combine some of those shipments into consolidations. Not being able to do that is a hidden cost of warehousing in Chicago."

Move Less, Faster

"There has been an overall reduction in the size of inventories while there has been an increase in the velocity of it. That is not a new concept, but that is one of the main things that we are doing," says Randy Moberg of American Hoechst Corp. "The other thing involves location," he adds.

"Wherever it is proving to be unprofitable to have a public warehouse or a consignment location," Moberg says, "Those are being eliminated or consolidated into one of our regional distribution centers or a regional public warehouse."

Moberg explains that a lot of Hoechst's products are imported. As a result, it is particularly hard to plan distribution or inventory levels because of the lead times. The result has been a tendency to overstate forecasts.

But he also points out that there has been a distribution organization in the company for only four or five years. "As big as this company is, he says, "we have become more professional only in the last five years. As we gain in people and expertise we will be able to do more with less." ★

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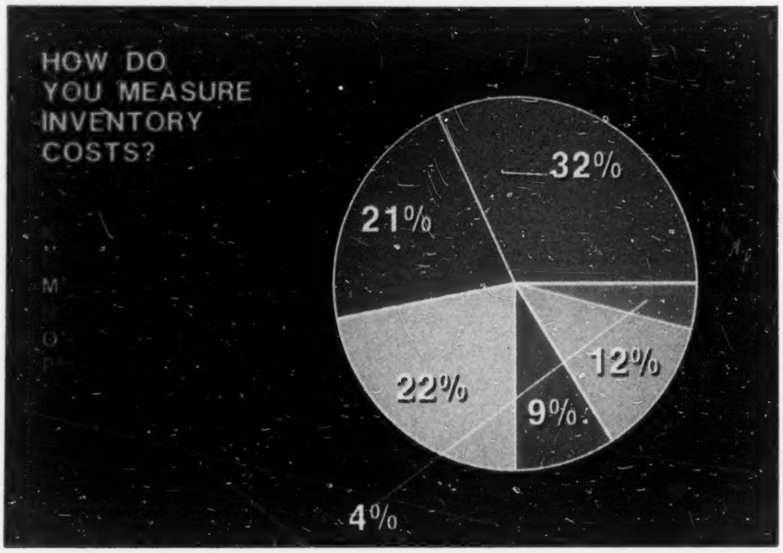
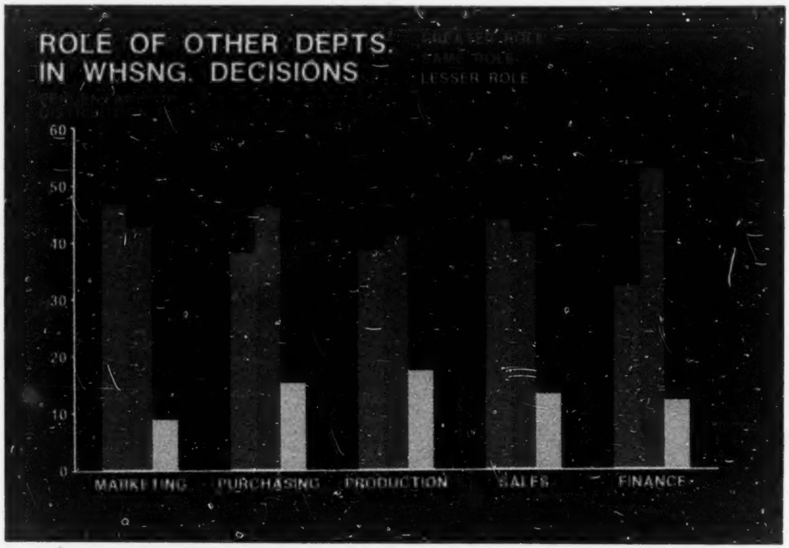


***How are distribution executives asked to measure their inventory costs? According to this survey, there is no one clear-cut way to assess them. Shippers reported that they now measure inventory costs in several ways, including: K) Time value of money/inventory carrying costs; L) Percentage of sales; M) Part of total distribution costs; N) Part of total transportation costs; O) Contribution to profit; and P) Other methods, including percentage of per-pallet capacity, value investing, months of sales, and dollars of working capital. Thirty-two percent of the respondents made it clear that time is money when it comes to measuring the value of inventory. The longer inventory sits on the shelves, the more it costs the company to keep it there.**

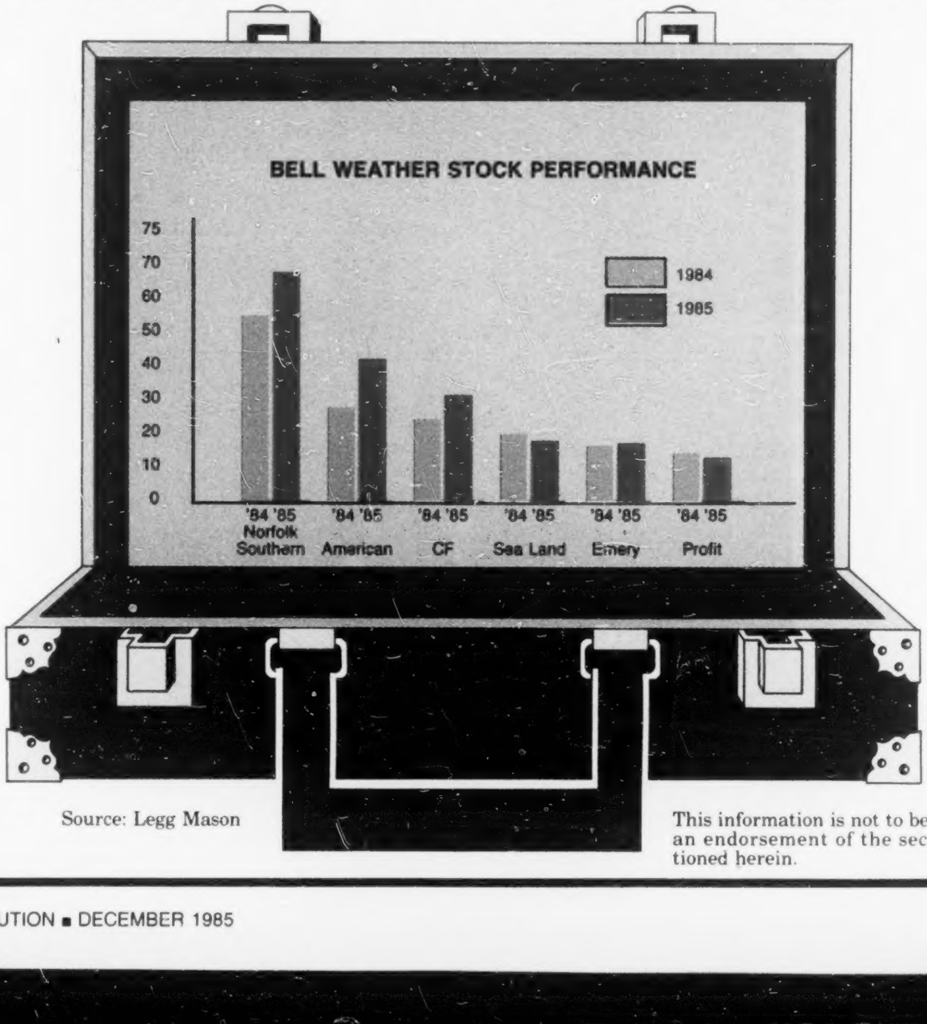


No doubt, you too are feeling the heightened influence of marketing and sales on your storage, location and inventory decisions. And other corporate departments, such as production, purchasing and financing, remain in the act, too. All appear to be playing increased roles when it comes to determining how warehouses, be they public or private, now fit into overall corporate logistics strategies.

CARRIER FINANCES

DISTRIBUTION'S CARRIER PORTFOLIO

The airlines have been the best performers over the last year due to surging traffic, the prospect of lower fuel prices, and the absence of rate wars. The truckers have also been excellent performers for mush the same reasons. Profitability for the railroads has been mixed. Traffic has been soft, reflecting the economy, but cost controls and non-rail operations have improved earnings for some. The shipping companies have suffered a complete reversal of earnings due to the slower worldwide economy and increased capacity. Investors have not been badly burned, however, having anticipated the troubles and having avoided bidding up the stocks. The air freight group, on the whole, has been lackluster. The companies are becoming more efficient, but expansion costs have kept the stocks out of the limelight. For all these stocks, the key to future gains is a recession-free economy.



Source: Legg Mason

This information is not to be construed as an endorsement of the securities mentioned herein.

CARRIER FINANCES

	Year	Current Ratio*	Long Term Debt/Equity	Profit Margin
AIR CARRIERS				
Airborne	1985	1.3	0.6	2.5%
	1984	1.2	0.4	2.6
Emery	1985	1.6	0.3	3.0
	1984	1.7	0.3	4.6
Federal	1985	1.2	0.6	7.2
	1984	1.3	0.7	1.9
Purolator	1985	2.1	0.8	(3.3)
	1984	1.7	0.5	1.5
Tiger	1985	NA	NA	(8.1)
	1984	NA	NA	5.2
AIRLINES				
American	1985	1.3	0.7	5.6
	1984	1.4	0.9	5.7
Delta	1985	0.6	0.4	1.8
	1984	0.7	0.6	3.7
Eastern	1985	0.9	4.9	B/E
	1984	0.9	7.6	1.8
Northwest	1985	0.8	0.3	5.2
	1984	1.0	0.1	6.6
Pan Am	1985	0.8	4.6	0.2
	1984	0.8	4.6	B/E
Piedmont	1985	1.0	1.1	4.1
	1984	1.1	1.6	5.8
Republic	1985	1.3	3.0	5.3
	1984	1.0	ME	1.6
United	1985	0.9	1.1	1.3
	1984	0.7	0.3	3.6
USAir	1985	1.8	0.5	5.7
	1984	1.7	0.6	8.5
AIR FORWARDERS				
Air Express	1985	1.0	0.6	(0.8)
	1984	1.2	2.7	0.4
Expeditors	1985	2.0	MD	4.7
	1984	2.1	MD	4.5
Harper Group	1985	1.5	MD	4.7
	1984	1.6	MD	4.9
Northern	1985	1.2	MD	0.8
	1984	1.2	MD	2.6
Profit	1985	1.3	0.2	2.6
	1984	1.4	MD	1.8
WTC	1985	1.1	0.2	0.5
	1984	1.2	0.2	2.7
MOTOR CARRIERS				
American Carriers	1985	1.0	MD	1.5
	1984	1.0	MD	2.5
Arkansas Best	1985	1.0	0.7	3.2
	1984	1.0	0.7	2.3
MOTOR CARRIERS (continued)				
Carolina Freight	1985	1.2	0.4	3.6
	1984	1.0	0.6	2.3
Consolidated	1985	1.5	0.1	4.9
	1984	1.5	0.1	4.8
Overnight	1985	2.2	MD	9.7
	1984	2.5	MD	9.6
Preston	1985	1.4	0.3	2.2
	1984	2.1	0.2	3.1
Roadway	1985	1.8	MD	2.5
	1984	2.4	MD	6.6
Transcon	1985	1.6	0.6	1.4
	1984	1.7	0.6	1.5
Yellow	1985	0.8	0.2	7.2
	1984	0.8	0.2	8.0
OCEAN CARRIERS				
American President Line	1985	1.2	0.5	0.1
	1984	1.4	0.7	0.1
McLean Industries	1985	1.0	2.9	(5.9)
	1984	1.3	1.9	6.6
Sea-Land	1985	0.7	0.5	1.9
	1984	1.1	0.5	6.5
RAILROADS				
Burlington Northern	1985	1.0	0.6	8.8
	1984	1.0	0.6	6.6
Canadian Pacific	1985	0.8	1.3	1.4
	1984	0.8	1.2	3.3
CSX	1985	1.2	0.5	6.4
	1984	1.1	0.4	6.5
Kansas City Southern	1985	1.1	0.5	9.9
	1984	1.0	0.4	9.5
Norfolk Southern	1985	0.7	0.2	11.8
	1984	1.0	0.2	(4.8)
SF/SP	1985	1.3	0.3	9.1
	1984	1.5	0.3	8.2
Union Pacific	1985	1.1	0.6	6.2
	1984	1.2	0.5	6.7
VEHICLE AND CONTAINER LESSORS				
Gelco	1985	2.3	8.2	2.1
	1984	2.4	8.8	1.4
Leaseway	1985	0.9	1.5	2.3
	1984	0.8	1.2	3.4
Rollins	1985	2.0	2.7	0.3
	1984	2.1	2.6	1.6
Ryder	1985	1.2	1.6	5.0
	1984	1.0	1.4	5.3

*Current ration equals current assets/current liability

KEY: NA = Not Available
MD = Minimal or no Data
B/E = Break Even
ME = Minimal Equity

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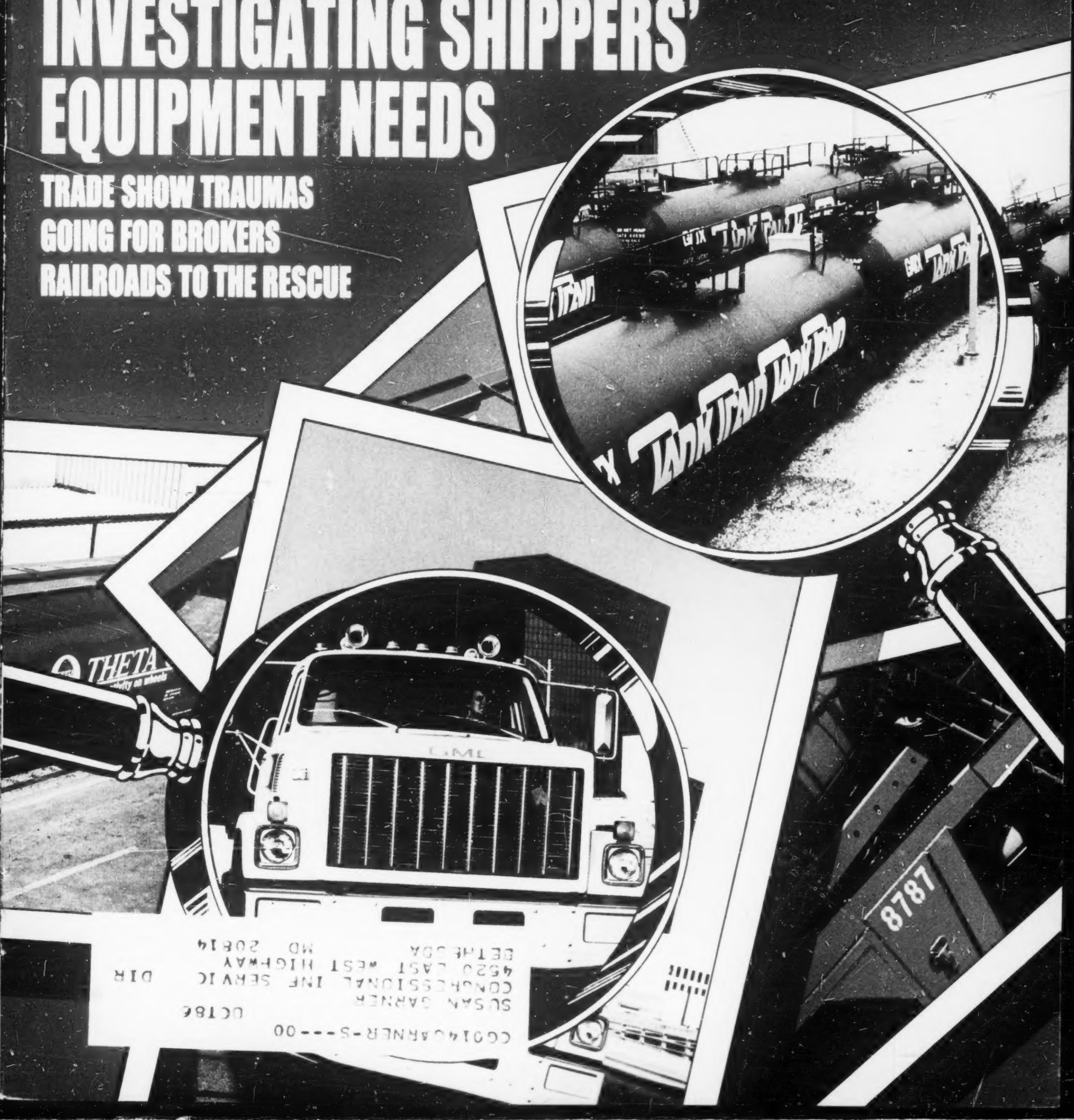
CHILTON'S
DISTRIBUTION
THE TRANSPORTATION & BUSINESS LOGISTICS MAGAZINE · JANUARY 1986

INVESTIGATING SHIPPERS' EQUIPMENT NEEDS

TRADE SHOW TRAUMAS

GOING FOR BROKERS

RAILROADS TO THE RESCUE



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VOL. 85, NO. 1

CHILTON'S
DISTRIBUTION

JANUARY 1986

COVER STORY

10 INVESTIGATING SHIPPERS' EQUIPMENT NEEDS
In part two of our series on transportation equipment, we listen to what shippers have to say about their now and future needs, and how the market affects what equipment is most profitable.

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Your company can get great exposure at a trade show—as long as someone's covered the bare essentials of exhibit logistics. And too often, the person responsible for doing so is not from the transportation department.

27 GOING FOR BROKERS?
Following a population boom among transportation brokers, DISTRIBUTION has compiled its second rundown of some of the pre-eminent offspring. This guide can be more valuable than the Yellow Pages when your fingers go walking in search of a transportation middleman.

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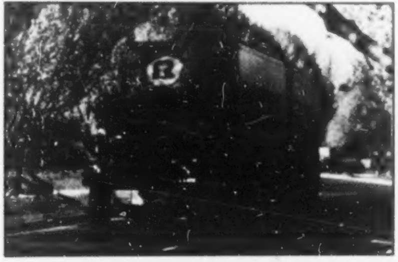

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In November, the question of the month involved brokers. *Have the image and effectiveness of these middlemen, we asked, evolved to the extent that their once shady reputation has given way to respect, or are shippers still unimpressed by the hype? What we've found is that, despite the public relations efforts of groups like the Transportation Brokers Conference of America, and the shining examples of a few dedicated brokers, shippers are, for the most part, still shying away from brokers. On the other hand, there are those shippers who say that the right broker can be a valuable friend. As one reader suggested, there are reputable brokers out there, but it's the shipper's job to sort out the bad apples. Here's what other readers had to say:*

"Why would we use brokers? There are enough carriers out there to handle our business. We'd rather not work with a company that takes a percentage of the charges and pays the actual transporter of the goods less than the going rates."**—Paul Robbins, traffic specialist, Colotex Corp., Tampa, Fla.**

"Even though I've seen a vast improvement, brokers don't seem to take my instructions seriously enough, especially in regard to timeliness."**—Russ Kartee, corporate traffic manager, National Pallet Leasing Systems, Port Washington, N.Y.**

"Some brokers work well in unbalanced lanes. They are also a determining factor in establishing whether our contract rates are reasonable."**—G. VanKell, managaer of motor transportation, Morton Salt, Chicago.**

"We got burned when a broker was unable to settle a claim with its carrier because they lacked the proper insurance."**—R. D. Moyer, traffic manger, C.T.M.S., Norcross, Ga.**

"I will not deal with brokers; there are enough quality carriers. Why pay a middleman who inflates a carrier's rate level."**—Greg Crech, transportation manager, Westwood Pharmaceuticals, Buffalo, N.Y.**

"The more professional and ethical they get, the more they will find themselves in a useful role in coordinating the needs of shippers and carriers, both large and small."**—William Carbone, manager of domestic transportation/distribution, Alumax, Inc., San Mateo, Calif.**

"They are generally responsive to my needs, yet I cannot depend on their equipment, safety, or service enough to make them a central part of my carrier mix."**—Thomas G. Flaherty, carrier service rep., Engelhard, Edison, N.J.**

continued

QUESTION OF THE MONTH

ARE YOU PART OF THE SHOW?

As you'll see from "The Exhibitionists" feature starting on page 20, the transportation bill for getting products to and from trade shows came to about $600 million last year. Did your traffic and distribution department have any control over the portion of that $600 million that was spent by your company?

From what we can gather, most trade show responsibilities fall to a small number of trade show specialists who, when it comes time to transport an exhibit, do little more than call a carrier. Traditional concerns with rates and routes don't seem to exist, nor does auditing on any meaningful level.

Are you ever asked to apply your expertise? Or is this simply a show run by sales or marketing? If you do get involved, is it simply to follow through on pickup and delivery instructions someone else has made, or do you have any real input with regard to carrier selection, rate negotiation, or liability considerations?

If you do have some input, which type of transportation companies do you find to be best suited for these delicate, time-critical moves?

Let us know on the card below just how much of a show you're expected to put on when it comes to exhibiting your company's wares.

DIALOGUE

January 1986

•My distribution department (______does/______does not) get involved extensively with trade show exhibit logistics. I think my department should get involved (______more/______less).

•When I do get involved with trade show logistics, it's to (check all that apply): ______select a carrier; ______determine/negotiate a rate; ______schedule and coordinate pickup/delivery for a predetermined carrier; ______process a claim; ______other (describe: ______________________________)

•Other people within my company who get heavily involved with exhibit logistics work for: ______marketing ______sales ______purchasing ______a special corporate exhibition dept.

•My company (______does/______does not) enlist the services of outside exhibition specialists to handle trade show logistics as part of a total service

•In my experience, when you have to get a trade show exhibit moved quickly, safely and at a reasonable cost, your best bet is to call a: ______van line/household goods carrier ______air freight forwarder ______specialized, irregular route motor carrier

•From what I've seen, the transportation charges my company now pays for the movement of products and exhibits to and from trade shows are: ______too high ______about what I'd expect ______impressively low

7

In my opinion, here's the biggest mistake most companies make when it comes to transporting their products and exhibits to and from trade shows:

NAME (print) TITLE

COMPANY PHONE

ADDRESS

CITY STATE ZIP

FIGURES IN SPEECH

(Quotes from transportation and distribution notables that have caught the ears of *DISTRIBUTION* editors:)

"We (in the motor carrier industry) no longer have a healthy industry. By any fair description, we are a financial disaster. The market is shrinking. . . . These circumstances have produced a shattered industry with large numbers (of carriers) on the brink of disaster, hanging on and cutting corners just to live another day."**—James C. Harkins, executive director, Regular Common Carrier Conference, to the Senate Committee on Commerce, Science, and Transportation.**

•

"The tidewater ports, and the railroads and steamship lines serving those ports, know full well they simply must keep their rates in line during the Great Lakes shipping season. The incentive is clear enough—The Lakes ports, and the railroads and steamship lines serving them, provide keen competition during the Lakes navigation season. There are those who say that the Lakes system 'keeps everybody honest.' "**—Davis Helberg, executive director, Port Authority of Duluth, before the House Subcommittee on Merchant Marine Oversight.**

"Brokers are cost effective, but very risky. Our president received a letter from a carrier asking us to put pressure on a broker for payment. We had paid the broker, but he, in turn, had used another broker who contracted with the carrier. It's the proverbial can of worms."**—D. Bruch, director of transportation/distribution, West Bend Co., West Bend, Wis.**

"We prefer to deal directly with carriers. However, we do recognize that they can be a viable source for additional carriers when needed. Unfortunately, there are too many of them to choose from. We only need a couple of dependable ones for our daily needs."**—Robert G. McCormick, assistant director of distribution, Bunge Edible Oil Corp., Kankakee, Ill.**

"We have had excellent results with a broker for 10 years. It has done a good job for us, responds to our needs, and helps us greatly. There will always be a need for brokers. When the 'right' one is found, life is a lot easier."**—Bob Carlotto, traffic manager, Rising Paper Co., Housatonic, Mass.**

"There is something wrong when a broker can make more money on a load than a trucking company. Obviously, the trucking company has the capital risk. Brokers can only improve their image after they start to do some long-term thinking."**—Roy Johnson, corporate traffic manager, Dillard Paper Co., Greensboro, N.C.**

TAKING STOCK OF BROKERS

Use of Brokers over last two years has increased	59%
decreased	15%
remained the same	20%
Brokers:	
should be avoided at all costs	19%
are a viable option in emergencies	24%
are viable for everyday routine	52%
I am impressed with efforts to create higher qualifications	59%
I believe these efforts will improve brokers' performasnce	70%
I locate brokers through:	
personal contacts	54%
word of mouth	32%
public directories	17%
My own company has made good use of its brokering authority	30%

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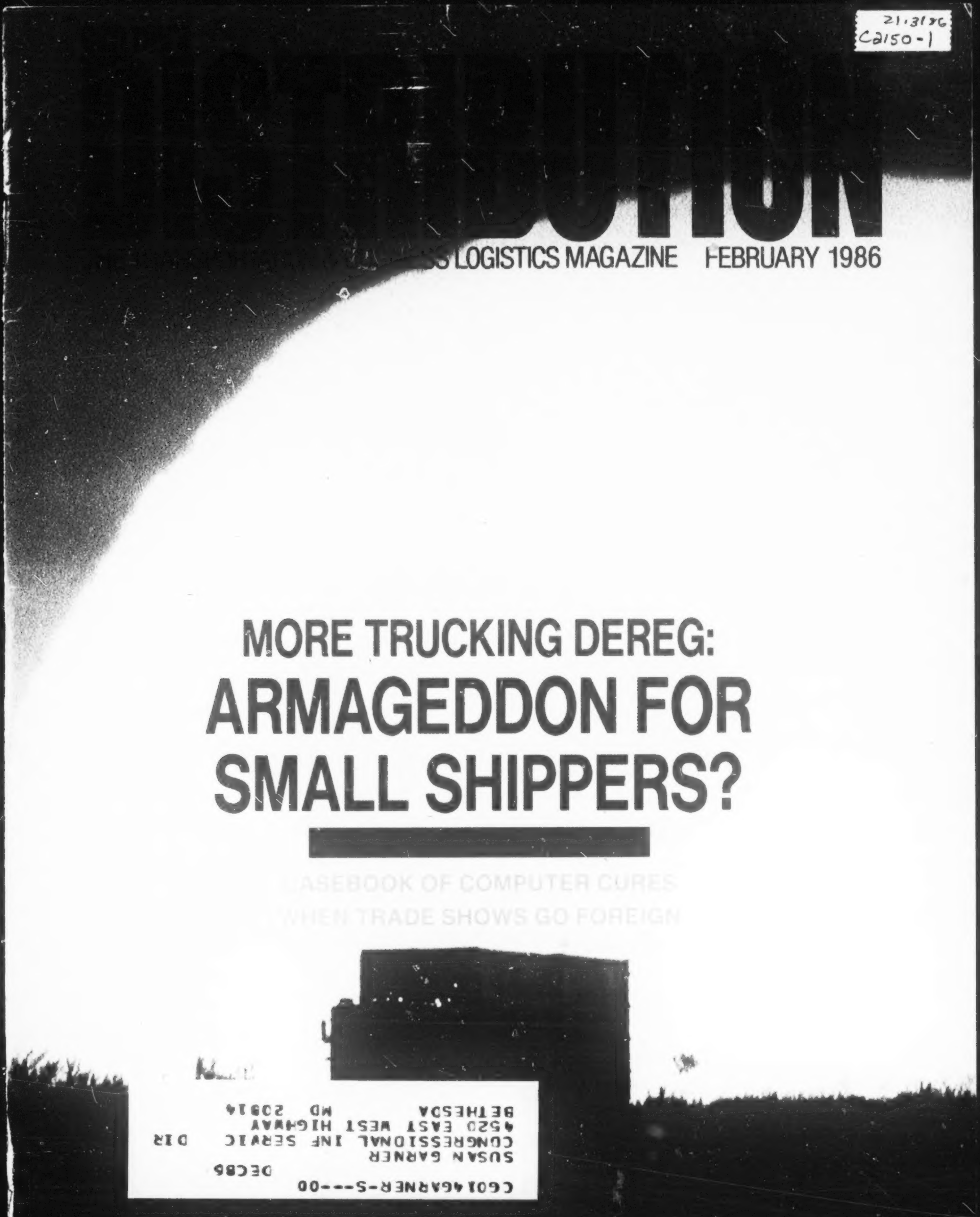

MORE TRUCKING DEREG:
ARMAGEDDON FOR SMALL SHIPPERS?

CASEBOOK OF COMPUTER CURES

WHEN TRADE SHOWS GO FOREIGN

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VOL. 85, NO. 2

Chilton's

DISTRIBUTION

FEBRUARY 1986

COVER STORY

10 MORE TRUCKING DEREG: ARMAGEDDON FOR SMALL SHIPPERS?
Sensational speculation to the contrary, tomorrow won't be 'the day after' for small shippers should collective ratemaking be terminated.

SPECIAL FEATURES

21 THE (INTERNATIONAL) EXHIBITIONISTS
The exhibit that worked in Chicago can also work in Paris or Tokyo. It's a little harder getting it over there, but you can do it—with a little help from your friends.

35 THE BEST ARE BACK
Here's your chance to show carriers how "Quality Counts."

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In 1986, the distribution industry will ride the coattails of the overall economy to another good year.

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From the family feet to the cybernetic elite, some vendors offer logistics systems that are hard to beat.

Saucony
Saucony

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Believe it or not, the ICC has some fans

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Insurance woes put shippers at peril, too

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Back to the future, or ahead to the past?

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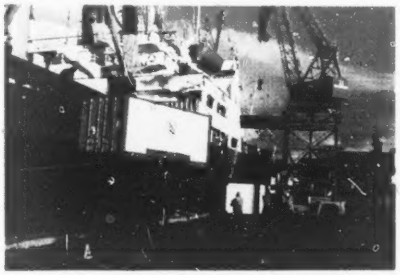
Maritime report



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Our December question asked readers to evaluate industry meetings. *The response indicates that, on the whole, annual gatherings and other industry seminars are valued by most transportation executives. To a lesser but still substantial extent, exhibitions held concurrent to informational sessions are also attractive to trade association members. Seemingly the least worthwhile events, in the eyes of attendees, are the sessions held by local groups, or local chapters of the major industry-wide associations. But the answers we received to our survey also indicated that the same attractions that make a meeting can break it as well. Attendees know what they want, but are quick to point out that it's quality, not quantity, they're looking for. And whether they've come because of the speakers, or seminars, or exhibitions, nothing lets them down faster than being "treated" to one that's badly presented. Here's what some of our readers had to say specifically about their experiences at trade association get-togethers:*

"The NCPDM and TDCC EDI conferences dispensed useful information which will enable us to develop EDI and a bar code system."**—B. L. Kaltenbaugh, traffic manager, Texocom, Atlanta.**

"At a very useful recent meeting, I heard an idea for a distribution advisory council made up of user's department heads."**—Arthur M. Ribe, transportation consultant, Birmingham, Ala.**

"The ideas I picked up at the transportation accounting sessions at the NCPDM conference were immediately implemented in our operation."**—William J. Willis, distribution manager, Long Beach, N.Y.**

"In 1983 I attended the annual meeting of the National Retail Merchants Association Traffic Board. The Apple Computer and Lisa were demonstrated, and I was convinced that the micro-computer was the way to go. At the present time I have two micros in the office. I handle a freight budget of just over $1 million, and since computerization productivity is up 200 percent."**—Glen E. Schneider, traffic manager, Robinson's of Florida, St. Petersburg, Fla.**

"At an industry meeting on importing, I learned that I could truck product from Italy to the Netherlands and then ship from Rotterdam to the U.S., and that it would be quicker and less expensive than to ship from Genoa. The speaker also furnished the names of specific trucklines that I could use to accomplish the movement."**—Henry Karel, director of distribution, Cleo Wrap division of Gibson Greetings, Inc., Memphis, Tenn.**

continued

QUESTION OF THE MONTH

PLANE TICKETS AND OIL CHANGES

Back when traffic and transportation departments had less interaction with other corporate departments, they were often asked to embrace other duties in addition to their primary function of shipping and receiving freight. These "non-freight" duties included such tasks as personnel relocations, employee travel, and auto fleet management. That meant traffic managers had to spend a fair amount of their time tracking down lost sofas, negotiating rental car discounts, or scheduling oil changes for 300 Buicks.

Now that traffic and transportation has grown into distribution and logistics, and your departments are more heavily involved with a much broader range of general corporate functions, do you still have to watch over these "non-freight" tasks, or have they been reassigned to other corporate departments? If they no longer come under your purview, or if they never have, do you think they should? If you still have them as an added responsibility, how do you organize your department to carry out the "non-freight" duties?

Please give us an indication of the extent of your involvement with "non-freight" duties by answering the questions on the card below.

DIALOGUE

February 1986

•Currently, my department has primary responsibility for these "non-freight" corporate duties (check all that apply):
______household moves for relocated employees;
______airline and train tickets for employees' business travel;
______negotiating corporate discounts for employee travel (airlines, rental cars, hotels, etc.);
______corporate auto fleet management;
______mailroom management;
______other (describe: ______________________________)

•Collectively, all of these "non-freight" duties occupy ______percent of my department's time, ______percent of its staff and ______percent of its budget.

•In the past ten years, my department has been asked to assume (______more/______less) of the responsibility for these non-freight duties.

•I feel these duties (______should/______should not) come under the purview of corporate logistics.

Here's what I think transportation/distribution's proper role in "non-freight" areas such as employee relocations and travel should be:

____

____

____

____

NAME (print) TITLE

COMPANY PHONE

ADDRESS

CITY STATE ZIP

FIGURES IN SPEECH

(Quotes from transportation and distribution notables that have caught the ears of *DISTRIBUTION* editors:)

"The veto of the textile and apparel quota bill is an important first step in the retail industry's battle to win freer trade—but it is only a first step. American consumers are already paying $8 billion to $12 billion more than they should each year for textile and apparel products as a result of a 30-year system of import quotas sanctioned by an international treaty known as the Multi-Fiber Arrangement (MFA). The MFA is scheduled to expire in July 1986. We are redoubling our efforts to seek the gradual elimination of this protectionist regime."—**James R. Williams, president, NRMA.**

•

"Some might question whether the 'freedom' (granted by the 1984 Shipping Act) has been more beneficial to shippers than to carriers. Exporters today must have a competitive price as well as service quality and the carriers must not only control their own costs, but also provide competitive domestic rates. As for those steamship companies which do not have personnel trained in domestic transport, I suggest they start right now. Total intermodalism is here to stay and there's no turning back."—**Daniel J. Kerrigan, president, ACL-USA.**

"The practical information I've picked up at industry meetings includes: a slide show report by Safeway on slipsheets versus pallets; details of the Textile Bill and the problems of protectionism; and a discussion of the Port of Seattle's new Cargo Express program, which is in direct competition with my employer."—**Susan L. Flood, traffic manager, Port of Tacoma, Tacoma, Wash.**

"I learned about upcoming industry trends at a local meeting of Delta Nu Alpha."—**Tony DiFranco, manager, Kenosha Auto Transport, Hampton, Va.**

"No meeting is a waste of time unless *you* make it that way."—**Lynn Smith, manager, transportation & shipping, NCR-MSD, Mountain View, Calif.**

"I picked up some cost-saving ideas at the NASSTRAC event." —**Mike Crenshaw, distribution analyst, Hilti, Inc., Tulsa, Okla.**

A MEETING OF MINDS

I attended the following meetings:	
Delta Nu Alpha	55%
various local chapters and traffic clubs	55%
NCPDM (CLM)	36%
NITL	27%
The meeting which was of the most practical value to attendees:	
NCPDM	27%
Least practical value:	
Local traffic clubs	18%
Biggest attractions of industry meetings:	
session topics	82%
speakers	64%
concurrent expositions	45%
meeting "themes"	27%
Biggest meeting turn-offs:	
old session topics	45%
speakers who give commercials	45%
frequent cocktail parties	36%
My management expects me to justify my attendance at meetings by showing cost savings	18%
Management does not expect justification by showing cost savings	55%

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ECONOMICS

FORECAST

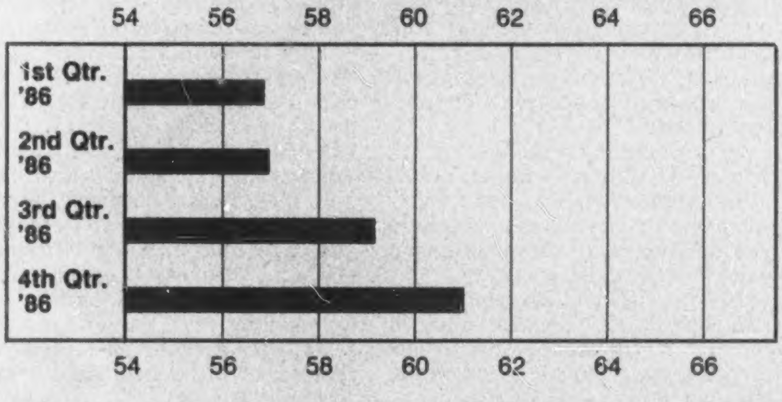
In 1986, the distribution industry will ride the coattails of the overall economy to another good year.

By Richard Lancioni, Ph.D., Contributing Editor

GENERAL ECONOMIC INDICATORS 1986 FORECAST

	1st QTR.	2nd QTR.	3rd QTR.	4th QTR.
Real GNP (billions)	$4,907.7	$4,125.4	$4,225.5	$4,275.3
Retail Car Sales (millions of units, annual rate)	10.5	10.0	10.2	10.3
Housing Starts (1000s of units, annual rate)	1.78	1.74	1.80	1.79
Prime Rate (%)	9.5	9.75	10.0	10.5
Personal Income (billions)	$3,249.8	$3,377.8	$3,425.1	$3,495.2
Inflation Rate (%)	3.7	4.1	4.5	4.8
Unemployment Rate (%)	7.0	6.9	6.9	6.8
Net Exports (billions of $)	80.1	80.0	81.0	81.5
Factory Utilization (%)	80.1	80.0	81.0	81.5

PURCHASING MANAGERS COMPOSITE INDEX 1986 FORECAST



The new year looks like another good one for the U.S. economy. As late as September 1985, many economists were forecasting a slowdown in 1986. But now, most anticipate that real gross national product will grow at an annual rate of more than 3 percent. The outlook has brightened for a variety of reasons, including the passage of the Gramm-Rudman budget-balancing bill, which should make Congressional members more conscious about reducing the federal deficit and moving ahead on tax reform.

Also, consumer confidence remains high, and with retail sales picking up in the fourth quarter of 1985, forecasters expect only a moderate slowdown in the first and second quarters of 1986.

Exports should do well in 1986 as the value of the dollar begins to fall against foreign currencies. This should make U.S. goods more affordable to foreign customers and improve the U.S. balance of trade. New exports should reach $90.2 billion by the third quarter of 1986 and continue to increase in the fourth quarter.

Along with the improvement in exports, U.S. automakers will have a healthy year. While Japanese imports are gaining in overall market share, U.S. companies should have another 10- to 11-million unit year. With profits averaging approximately $2,000 to $3,000 per unit, profits in 1986 should exceed those of 1985.

Inflation will continue at a slow pace in 1986, holding at 3 to 4 percent throughout the year. The rate will tend to increase at the end of the year as imported goods become more expensive with the

continued

decline in the value of the dollar. The prime rate will remain relatively constant throughout the year, starting off at below 10 percent and rising to approximately 10.5 percent by year's end. This is due in part to the higher deficit requirements of the federal government in the fourth quarter of 1986. Although the increase in interest rates should be relatively mild, the interest could be higher if Congress fails to deal with the deficit problem constructively.

Housing starts should remain strong in 1986 and factory utilization should stay at around 80 percent for most of the year. While consumer demand remains strong, capital goods orders are sluggish and firms were reluctant in the latter part of 1985 to invest heavily in new plant and equipment. This should change somewhat in 1986 as old equipment is replaced and modernized. If imports decline in some industries, we may see a sharper increase in new plant investment in 1986.

In the distribution sector, 1986 should prove to be a good year. Truck shipments will increase slowly throughout the year, along with rail, air and water shipments. Warehouse utilization should remain constant, rising by only a moderate amount in the fourth quarter due to the buildup in inventories for the Christmas season. A big factor which will continue to impact on inventory levels is the gradual move toward just-in-time inventory management systems. Distribution managers in 1986 will continue to get pressure from their top managers to keep inventory costs down and improve customer service without increasing inventory levels. Since inventory costs account for as much as 44 percent of a firm's total logistics costs, emphasis on lower inventory levels will be great. Along with this, inventory valuation will continue to remain low, rising to the 134.6 level by the end of the fourth quarter.

Distribution managers will continue to face some interesting challenges in 1986 which will impact on how they manage their operations. These include:

- An increased emphasis on making distribution a profit center and moving away from the traditional cost center approach. This will require that distribution managers develop better accounting systems for their operations so that the true cost of distribution can be calculated and its impact on the firm determined. Historically, companies have not accurately considered the true cost of distribution. Traditionally, they have relied on aggregate measures of distribution cost, considering it to be a transportation cost center or allocating it to production or marketing.
- In 1986, distribution managers will see a greater decentralization of the distribution function and a broadening of its responsibilities to include not only warehousing, inventory, transportation, and order processing, but also transport and purchasing. This trend has been happening slowly over the past 5 years,, but will accelerate in 1986. In fact, the trend is toward the development of totally integrated systems.

continued

DISTRIBUTION INDEX—1986 FORECAST

	1st QTR.	2nd QTR.	3rd QTR	4th QTR.
Truck Shipments	146.7	146.9	147.1	147.9
Rail Shipments	127.4	126.9	127.1	127.9
Air Shipments	134.1	135.5	136.7	138.6
Water Shipments	117.1	118.3	119.2	118.7
Warehouse Space Utilization	133.1	132.2	132.5	134.6
Inventory Valuation	112.1	112.4	112.1	112.8

DIESEL FUEL PRICES—1986 FORECAST (cents per gallon)

	1st QTR.	2nd QTR.	3rd QTR.	4th QTR.
Full-Serve	128.2	128.9	129.1	129.5
Self-Serve	116.4	116.9	117.1	117.8

Source: Household Goods Carriers Bureau. Figures are estimates calculated by author.

TRANSPORTATION COST INDEXES (1977 = 100.0)

	1st QTR.	2nd QTR.	3rd QTR.	4th QTR.
Rail	185.0	185.9	186.1	186.8
Truck	175.0	174.8	174.0	174.8
Barge	188.0	188.5	188.6	189.0

Source: Data Resources Inc.

- Distribution managers should face a relatively peaceful year in the labor area, with few if any major disruptions in the transportation sector. In fact, labor costs will rise by only 3 percent in 1986. As one private fleet manager stated, "Labor peace in my organization has meant improved productivity, improved customer service, and a better sense on the part of drivers of pride in their work and in the company. We expect more of the same in 1986."
- Customer service will continue to be stressed in 1986 as the main objective of distribution. This will require that distribution managers attempt to coordinate their efforts more closely with marketing and production, so that, as one distribution manager has said, "few out-of-stock surprises occur."
- The name of the game in 1986 will change from distribution management to logistics management. This was given impetus by the announcement by the NCPDM that the organization's name had been changed to the Council of Logistics Management. What this means for the traditional distribution executive, besides a new title, is increased responsibility, a new respect in the organization, and a move toward total control of the complete product flow in the firm.

Fuel Prices and Transportation Costs

Fuel costs should remain stable during 1986. Full-serve diesel prices will increase by only a penny and a half throughout the year, rising to an estimated $1.29 by year's end. Self-serve prices will rise by about the same amount, reaching $1.17 a gallon in the fourth quarter. While fuel remains an important component in transportation, distribution managers in 1986 can develop plans which reflect no more than a 3 to 5 percent rise for the year. Looking at the cost of moving freight, the same trend can be noticed. The cost of moving freight by rail will rise only moderately from 185.0 in the first quarter to the estimated 186.8 level by the end of the year. Motor truck rates may actually moderate in 1986 with all of the discounting that is taking place in the industry, reaching the 174.8 level by year's end. The same moderation can also be noticed in barge and water transport. In fact, as shown in the Freight Rate Index (below), the overall trend in freight rates over the last six years has been one of only moderate increases from year to year:

1980-81	7.6%
1981-82	1.5%
1982-83	2.2%
1983-84	2.3%
1984-85	3.4%
1985-86 (est.)	5.2%

Purchasing Index

One of the key indicators in the growth of the economy is the rate of expenditures made by firms for capital equipment and supplies. In the last quarter of 1985, orders for machine tools and other capital goods were sluggish and faced continued competition from foreign imports. While this threat will continue in 1986, orders for capital goods should expand as domestic demand increases. The purchasing management index for 1986 (p. 36) is estimated to grow steadily throughout the year and reach the 61.0 level by the end of the fourth quarter.

Summary

By all indications 1986 should be another good recovery year for the economy. Of course, as in all projections, many things have to remain constant, and certain things must happen. For example, the U.S. dollar will have to continue to decline by another 25 percent in 1986 if exports are to grow. In addition, some progress has to be made on balancing the budget and reducing the federal deficit. The U.S. is currently financing its debt with foreign investments, and if these investments are curtailed, interest rates will rise and inflation will increase. It is assumed that few major strikes will occur in 1986 and that fuel prices will remain stable. But an upheaval in the Middle East could change the fuel picture overnight.

One distribution manager noted, "The distribution industry is at the mercy of numerous elements—labor unions, government regulation, foreign competition, and domestic competition—but the greatest threat is ourselves. Industry managers must stop putting out fires and start anticipating change before it occurs. In short, we have to be *proactive* managers if we are to gain the respect of our colleagues in marketing, production, and finance. We should take advantage of the positive economic times to prove ourselves to top management before bad times set in and we become cost burdens which have to be reduced. 1986 is the year to do it, and we should take advantage of the opportunity." ★

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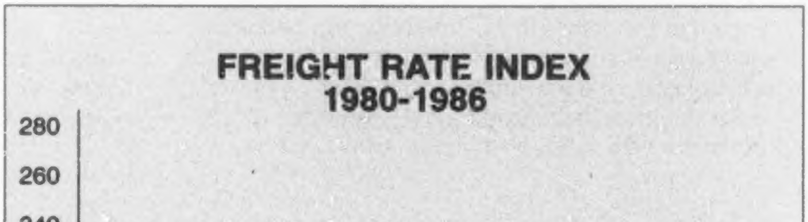

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CHILTON'S

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THE TRANSPORTATION & BUSINESS LOGISTICS MAGAZINE MARCH 1986

FINDING YOUR WAY THROUGH THE MARITIME FOG

Tales of Leasing, and Other Great Fleets

Getting Wrapped Up with Packaging

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SUSAN GARNER
CONGRESSIONAL INF SERVIC DIR
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BETHESDA MD 20814

VOL. 85, NO. 3

CHILTON'S
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MARCH 1986

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In the interest of survival (both their own, and their carriers'), ocean shippers are peering through the present murky morass and establishing long-term operational guidelines.

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Whether your company makes cannon balls or cameras, distribution has packaging concerns. That is, unless you want your cameras ending up looking like cannon balls.

30 SECOND TIME AROUND
You can't buy any more time for the transportation issues that remain on the agenda of the 99th Congress; if they don't get resolved this year, they may expire for good.

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SIECOR
SIECOR

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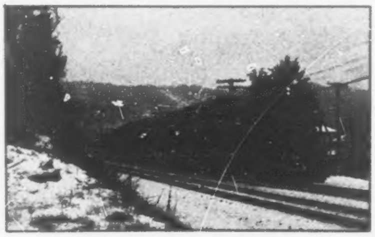
Shippers size up rail services



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DIALOGUE

Our January question asked readers to comment on transporting trade show exhibits. *Most of the respondents indicated that, although they are frequently involved with moving exhibits to and from shows, they generally believe they are not given enough control, or enough cooperation, by their firm's sales and marketing departments. Often, they claim, the transportation department is consulted on such movements only after problems arise. The biggest complaint by far was that not enough lead time was provided when the transportation was arranged. But there were other dangers cited as well. Here's what our readers said:*

"The biggest mistake is not allowing adequate time for delivery. Also, packaging is often incomplete."—**David A. White, materials manager, Transpro, Inc., Mt. Vernon, Mo.**

"Companies fail to allow enough time for shipping and processing, and don't share their show schedules far enough in advance for planning."—**John Strauss, transportation rate administrator, W. W. Grainger, Inc., Chicago.**

"Many shippers use unknown carriers, which use workers not specialized in setting up products and exhibits."—**John Slekis, traffic manager, Hyde Park, Mass.**

"I feel that carriers are paying damage claims that occur by exhibition handlers because we have very little damage on our shipments."—**John Cowie, traffic manager, Band-It Houdaille, Inc., Denver.**

"Too often, marketing and sales departments make deals and then call the transportation department at the last minute to say it's got to be there on such-and-such a date. Transportation people need time to do their job."—**T. R. Rhyne, traffic administrator, Joslyn Clark Control, Lancaster, S. C.**

"The biggest mistake is accepting past failures."—**Ralph Sepanski, general manager, Capico Manufacturing Co., Branford, Conn.**

"Exhibiters should allow their traffic departments to do the job. They are equipped to make sure exhibits arrive on time, without damage, and at a reasonable cost."—**R. J. Marshall, Jr., traffic manager, Duraco Products, Inc.**

"The most common mistake is not allowing enough time to transport the shipment. Premium transportation for an exhibit should be kept to a minimum."—**J. Perry, traffic supervisor, General Electric Co., King of Prussia, Pa.**

continued

QUESTION OF THE MONTH

A PLACE TO CALL HOME

American business is on the move. Piece by piece the industrial heartland of the country is being transplanted from the Northeast to the South and Southeast. But not all of the moves are being made for the same reasons, and not all are in the same direction. If the flood is toward the South, there is a more modest undercurrent drawing some companies northward too.

We'd like to know how important transportation factors are in the decision to relocate. Where does the advantage of proximity to suppliers fall in relation to the benefits of cheap labor and low tax rates? What about interstate highways? Are liberalized size and weight limits on the interstates enough to draw your firm closer to an exit ramp? Or has the abandonment of rail service left you isolated at your present site?

If you're thinking of adding a warehouse or distribution center, how does the state of intrastate regulation affect the choice of location? Is your company an importer or exporter? How essential is it that you locate near an air or seaport?

Finally, how much do you, as a distribution manager, get involved in the site selection process? Let us know on the card below.

DIALOGUE

March 1986

• Has your company opened a new facility, or relocated an existing facility in a new state, within the past two years? _____Yes _____No. To which state was the move made? _____ What kind of facility was involved? __________

• The major reasons for selecting the new location were (check all that are appropriate):
_____proximity to suppliers; _____proximity to customers;
_____cost of labor; _____local transportation network;
_____tax advantages; _____other (specify) __________

• As a transportation/distribution manager, how much input do you have into site location decisions? _____a great deal;
_____some; _____very little.

• Which of your corporate departments seems to have the most influence in site location decisions?
_____transportation/distribution; _____finance;
_____marketing/sales; _____production/operations;
_____executive.

7

Transportation/distribution's role in site locations should be:

NAME (print) TITLE
COMPANY PHONE
ADDRESS
CITY STATE ZIP

FIGURES IN SPEECH

(Quotes from transportation and distribution notables that have caught the ears of *DISTRIBUTION* editors:)

"People in Washington are looking for ways to more narrowly target unfair trade practices and ease pressures in this fashion, rather than to institute sweeping trade reforms. In 1934, the Foreign Trade Zone Act did little to help the international trading climate, but with the system now in place, foreign trade zones can and are helping to provide solutions to some of the thornier trade problems, by bringing new jobs, not necessarily new products, to the United States."**—William von Raab, commissioner, U.S. Customs Service.**

•

"It boggles the mind to think that there are some cargoes moving in 40-foot containers outbound to the Far East and Europe that garner total revenues for the lines in the $400 to $600 range. That amount, after all contributions to the expense side of the ledger, sometimes costs more than if the line just moved an empty container back. The cash reserves many lines had are gone. If you manage to get the right mix, you get to work another day. If you do not, you become another casualty."**—Ole A. Sweelund, vice president of operations, U.S. Northern Service, Trans Freight Lines, Inc.**

"Marketing fails to work with distribution when the display materials are designed, so they end up being packaged for appearance, but not for shipping across the country to a trade show. Then marketing wonders why the exhibit arrives in a damaged condition."**—James J. Paule, traffic manager, Spangler Candy Co., Bryan, Oh.**

"Too many of the people handling trade show transportation don't expect the pitfalls and all of the rip-off schemes they run up against. They make costly mistakes and then expect the traffic people to bail them out. The trick is to avoid problems in the first place. Nobody can help you once you get involved in a rip-off."**—Charles Welcome, traffic manager, EHV-Weidmann Ind. St. Johnsbury, Vt.**

"Most companies give up the responsibility to the sales department without reviewing the logistics of the move."**—Jerome A. Fisher, traffic manager, Lucas Milhaupt, Inc. Cudahy, Wisc.**

"There are often no controls; no follow-up. Companies assume everything will happen correctly, and do not trace their shipments."**—Frank Vavrick, traffic manager, Giltspur Exhibits, Rochester, N.Y.**

"Why should being your own customer be any different than the way you treat the ones that pay the bills?"**—Dave Adicisson, director of transportation, Inca Metal Products, Lewisville, Tex.**

EXHIBITION SEASON

My distribution department gets extensively involved	
in exhibit logistics	67%
my department should be more involved	73%
When I get involved in trade show logistics, it's to:	
select a carrier	73%
arrange pickup/delivery for a predetermined carrier	68%
negotiate a rate	50%
Other departments heavily involved in exhibit logistics are:	
marketing	68%
sales	50%
Your best bet for moving trade show exhibits is a:	
van line	41%
specialized, irregular route motor carrier	32%
The transportation charges my company pays for exhibits are:	
what I'd expect	45%
too high	41%

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THE TRANSPORTATION & BUSINESS LOGISTICS MAGAZINE APRIL 1986

THE BIG RAIL SHIPPERS SPEAK OUT

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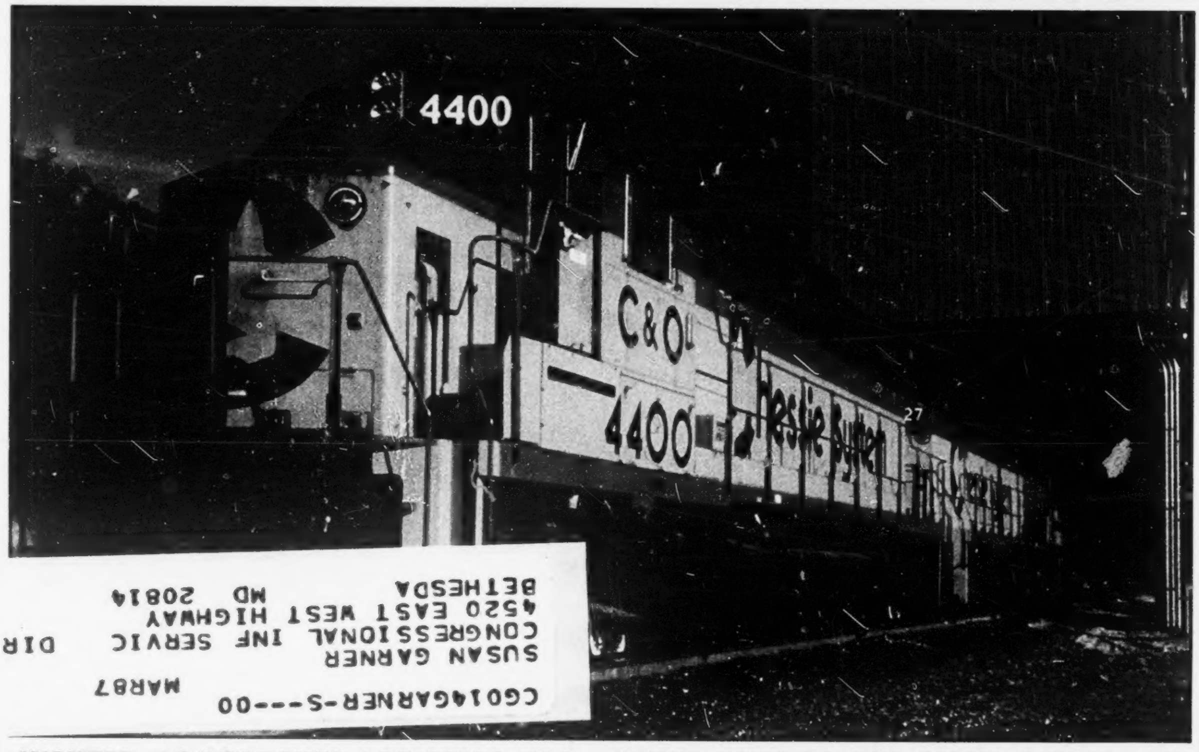
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VOL. 85, NO. 4

CHILTON'S

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APRIL 1986

COVER STORY

10 THE BIG RAIL SHIPPERS SPEAK OUT
Representing a cross-section of rail service needs, transportation execs from three major industries have little trouble verbalizing what's pleased them, and peeved them, in their life after Staggers.

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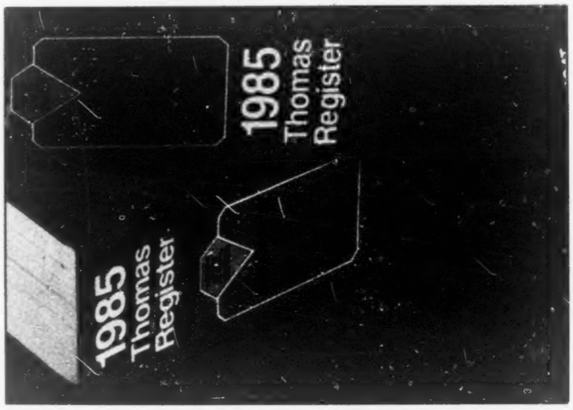
25 CASEBOOK: SMALL SHIPMENT SERVICES
Small shipments are no small matter for many distribution operations, but here are two examples of small package shippers who cut big problems down to size.

28 WANTED: TOMORROW'S LOGISTICS PRO
Major companies are on the lookout for innovative transportation/distribution executives. Characteristics: excellent general manager; tough negotiator; sophisticated communicator; fluent in computer language; extremely cost-conscious.



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The reality of life in the big leagues

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Plane tickets and oil changes

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They want to move those refrigerators

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NEXT MONTH

What's in a hub?

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DIALOGUE

Our February question asked readers how much responsibility they had for "non-freight" activities, *such as personnel relocations, auto fleet management, mailroom management, and business travel. Far from feeling that these duties are distractions that should be handled by other departments, the overwhelming majority of our readers reasoned that the savvy found in the transportation/distribution department made it the logical center for these activities. Who better to manage the movement of people than those who are experts at moving freight, they ask.*

"Logistics people should handle all materials movement, but should not be involved in personnel moves, travel, tickets, etc."**—Hugh E. Kinksey, supervisor of warehouse planning, Brookshire Grocery, Tyler, Tex.**

"Transportation/distribution is the logical place for these functions to be handled."**–R. G. Hauth, National Brush Co., Aurora, Ill.**

"Non-freight areas should be a part of the logistics function. There should be a division of logistics into freight, passenger, household goods, private fleet, etc., in order to integrate and make the best use of transportation personnel."**—Glen E. Schneider, transportation manager, Robinson's of Florida.**

"Relocations are better handled by personnel or purchasing, but we negotiate the rates and pre-audit the bills. The transportation department is also better equipped to work out claims."**—J. Pennell Abbott, transportation manager, Cutter Biological, Emeryville, Calif.**

"There is no reason the transportation/distribution people should not handle 'non-freight' duties, as long as a positive impact is felt on the bottom line, and no more effective administrating department is available."**—Ed Brandt, transportation manager, J. R. Simplot Co., Boise, Id.**

"I work for a small company, and it works out well for me to handle 'non-freight' items. This keeps me in constant contact with top management and gives me an overall view of what the company is doing. In a larger company this wouldn't work as well."**—Ray Stowers, traffic manager, Martin Fireproofing, Elberton, Ga.**

"There should be an increased responsibility in 'non-freight' areas for the transportation/distribution function, and a reduced role for departments such as personnel."**—D. W. Ackerman, director of purchasing, P-I-E Nationwide, Jacksonville, Fla.**

"Negotiation is a large part of our role in transportation/distribution,

continued

QUESTION OF THE MONTH

A PERMANENT INTERMODAL INTERLUDE?

Even before the intermodal "boom" has had a chance to reach full proportions plenty of detractors have surfaced who are intent on deflating the importance of bi- or trimodal transport options.

On one hand, we have continued fervor for the efficiencies and merits of double-stacking, truck-to-rail transfers, and other variations on the intermodal theme which continue to be introduced.

On the other hand, though, "new" intermodal developments such as the RoadRailer—which has now been around longer than paved highways themselves, it seems—continue to limp through prolonged "test" phases with less than instant acceptance.

Some shippers believe intermodalism still has too few answers and too many questions. These questions include: Why does there continue to be so many equipment handling and compatibility problems with intermodal service? Why must the third parties that are so integral to intermodal service continue to muddle the picture?

We'd like to find out, through the questions on the card below, on which side of the intermodal fence you're currently standing.

DIALOGUE

April 1986

•Intermodal services of any type currently account for
______percent of my total annual freight volume and
______percent of my total annual freight bill.

•The statement which best summarizes my current assessment of intermodalism's potential is (check ONE only, or fill in your own):
______Intermodalism still has a great future; it has only begun to realize its potential.
______Intermodalism has peaked out in terms of growth and will continue to serve future shippers' needs at pretty close to its current level.
______Intermodalism's best days are behind it; it will backslide in the years to come to the point where it eventually will be reduced to gimmick status only.
______Intermodalism ______________________

•When problems do occur with intermodal service, it's usually because of (check all that apply):
______equipment unavailability or incompatibility;
______inadequate departure schedules and in-transit delays;
______excessive handling, increased loss and damage;
______confusion over carrier responsibility and communications, because of the involvement of third parties (shippers' associations and agents, forwarders, brokers, etc.);
______other (explain:) ______________________

Here's what it would take to get more shippers to use piggyback and other intermodal service options:

____

____

____

____

NAME (print) TITLE
COMPANY PHONE
ADDRESS
CITY STATE ZIP

7

FIGURES IN SPEECH

(Quotes from transportation and distribution notables that have caught the ears of *DISTRIBUTION* editors:)

"While the President's budget shows zeroing out ICC funding, it still requires an act of Congress to close the Commission's doors. Therefore it [the proposal to sunset the ICC] prevents further deregulation of the industry through the back door by using the budget process, and instead forces full debate by both houses of Congress."—**Thomas J. Donahue, ATA president and CEO.**

•

"The Administration has sent its highway bill to Congress. The bill contains some good news and some bad news. The good news is that highway user fees are not increased and some exemptions and cost expanders are terminated. The bad news is the bill contemplates spending far less on highways over the next four years than the needs require, while at the same time continuing some exemptions, some cost expanders, and putting in place machinery that could increase the diversion of highway user tax revenues from the present $1.2 billion per year to almost $4 billion per year."—**Thomas A. Callaghan, Jr., Alliance for Simple, Equitable & Rational Truck Taxation.**

and relocation and travel offer the same challenges in productivity improvement and cost-cutting as does moving freight."—**Ed Loftus, distribution/transportation manager, Ampex Corp., Opelika, Ala.**

"Because of our negotiating expertise with carriers in transportation, we can and do make a significant contribution in 'non-freight' areas, too."—**Julio Alvarez, director of transportation, Burdines, Miami.**

"Since our role involves transportation, our department has the most expertise in this area. We do not view it as a problem."—**T. M. Conley, traffic manager, Frantz Manufacturing Co., Sterling, Ill.**

"We negotiate the contracts for required transportation services, then let user groups other than traffic handle the day-to-day operations."—**Thomas R. Hart, director of worldwide traffic, Burroughs Corp., Wayne, Mich.**

"Household moves can be considered 'personal freight,' and should be controlled by someone with knowledge of tariff rules and regulations, so that we are not taken advantage of by carriers. The mailrooms also handle packages that could be more effectively controlled."—**Irvin E. Thrush, traffic coordinator, GA Technologies, Inc., San Diego.**

PLANE TICKETS AND OIL CHANGES

Transportation/distribution department has responsibility for:	
household goods moves	68%
negotiating discounts for corporate travel	43%
auto fleet management	38%
tickets for business travel	35%
mailroom management	32%
Collectively, "non-freight" duties account for this percentage of transportation/distribution's resources:	
time	17%
staff	14%
budget	9%
In the past ten years, "non-freight" responsibilities have:	
increased	70%
decreased	14%
"Non-freight" duties should come under the purview of corporate logistics	84%
"Non-freight" duties should not come under the purview of corporate logistics	14%

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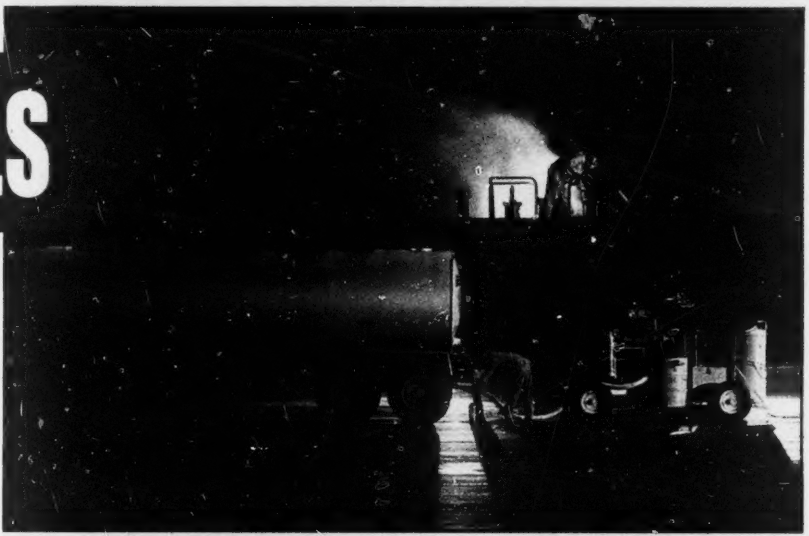
FOOD

Inflation, deregulation and computers make food shipping a new ballgame. Railroads are working hard to keep playing.

CHEMICALS

Equipment hasn't changed in 25 years, bulk shippers say. But suppliers are certainly marketing themselves differently these days.



METALS

After deregulation, truckers became 'partners' in the metal shipper's business. Now those shippers hope railroads will do the same.

RAIL SERVICES

THE BIG RAIL SHIPPERS SPEAK OUT

Representing a cross-section of rail service needs, transportation execs from three major industries have little trouble verbalizing what's pleased them, and peeved them, in their life after Staggers.

A DISTRIBUTION Staff Report

If it's not your first question right off, it certainly will be after you look at the table on page 12: Since when does a report on "the big rail shippers" fail to include the biggest rail shipping industry of them all—coal, which continues to grab a larger and larger percentage of the rail commodity mix?

The answer, quite simply, is that we used a different set of statistics to determine which three industries we would focus on for this year's rail report. We took a look at a breakdown of our circulation, which told us that among our readership, the three industries with the greatest interest in rail services are "food and kindred products," "chemicals and allied products," and "fabricated metal products/machinery."

That suited us just fine, because those three industries also make use of just about every type of rail service. The fates of boxcars and piggyback trains are closely tied to the food industry; chemicals largely dictate the fortunes of the bulk and tank car segments; and metals/machinery play a big role in movements via gondolas, flat cars, hoppers, and import/export.

Collectively, the input we've received from shippers in these three industries has provided a very good reading on the reaction of the railroad industry as a whole to all shippers' needs for the '80s. But what about coal, you ask? Well, that's a story in itself—one we'll save for another issue.

THE 500-MILE RULE

By Fletcher Cox

The watchword today in food operations across the country is "time-sensitivity." "Railroading as usual" is out. Period. No, make that an exclamation point.

For bulk commodities and "food and kindred products" that are not "time-sensitive" and are traveling 500 miles or more, rail is a very attractive option and is still in wide use. But for short-haul food shipments, the use of boxcars and mechanical refrigerated cars is almost a thing of the past.

"It was so frustrating," says the Midwestern secretary as she waits for her boss to come to the telephone. "We could see the freight car we wanted two blocks away. Our people were yelling at us for the lettuce or the oranges—and we *couldn't* get the railroad to move that car over here!"

That's a fictional anecdote, but it's still true to life.

Figures compiled by the Food Marketing Institute, an association of retailers and wholesalers, tell this story about the average number of inbound shipments per week for dry grocery distribution centers: By rail, 12 in 1982 and 6 in 1984; by truck, 137 in 1982 and 190 in 1984.

Inbound rail shipments for refrigerated foods are so few that the association doesn't survey for them any more, a spokeswoman for the Institute says.

Revenue carloading figures collected by the Association of American Railroads (AAR) show 925,000 cars of food and kindred products for 1980 and 566,000 for 1985, a drop of 38.8 percent.

On the other hand, these statistics cannot reflect probable diversions to intermodal, and "there *has* to be food moving intermodal," says John H. Curtis, vice president, intermodal, for Matlack, Inc., and veteran of a few decades with the Illinois Central Gulf Railroad. Indeed, the number of trailers and containers moving on revenue cars by rail has climbed by 50.5 percent, from 3,059,402 in 1980 to 4,605,099 in 1985, according to the AAR.

Nevertheless, a series of checks with consultants, shippers, and railroads shows a major shift in food shipping practices. "Time-sensitivity" has grown like radishes in the deregulated 1980s.

The Trucks are There

Three factors are involved.

One, of far greater importance than the partial deregulation of freight railroads is the partial deregulation of trucking. "Scheduling was the problem with rail," says Mike Nerzig, vice president of Eric C. Baum and Associates, Chicago, a management consulting firm. "With the railroad, you

continued

might not get the one car you were looking for or you might get too many at one time."

Trucks, on the other hand, can be scheduled by warehouse managers to balance out their work load. "They can apply performance standards to the receiving operations," Nerzig says.

"We have been out of rail cars for three or four years now, and we have filled in our rail docks at the main warehouse," says Douglas Pope, vice president-distribution for Seaway Food Town in Maumee, Ohio. This 73-store retail grocery chain has its own fleet of trucks and uses common carriers as needed. Shipments from all over the country arrive either by piggyback (California to a pickup point in Chicago, and Florida to Cincinnati) or by truck. The company's trucks travel up to 180 miles to make deliveries, and they may be sent another 50 miles or so to pick up backhauls. "We're very pleased with the service we get from the trucking companies," says Pope.

A second factor is the personal computer. "There's lots of software out there for PCs, and even the small guys have the tools for 'what-if' studies," says William J. Rennicke, principal in the transportation and logistics group for Temple, Barker & Sloane, Inc., Lexington, Mass. Whereas receiving used to be handled by one person or group, inventory by someone else, and shipping by a third party, the PC makes it possible to consolidate all three functions for sophisticated cost analyses, scheduling, and planning.

The third factor is the lesson, learned the hard way in the bad old days of high double-digit interest rates: maintaining large inventories is like keeping a sailboat or a mistress—it's a money sink.

"There has been a tremendous move toward the 'just-in-time' concept," reports another manager of nationwide shipping. "Shipments are more and more time-sensitive and quantities are smaller. The customer doesn't want to bother with the large quantities that go with rail."

"I find that the railroads still can't reliably tell you when your car's going to get there," says Brock Partin, vice president-operations for Proficient Food Company in Irvine, Calif. His company (a subsidiary of Denny's) serves roughly 2,000 restaurants across the country, "and when a customer wants ham and eggs, he wants his ham and eggs and not a story about a delayed freight car."

Major food processing companies who ship nationally agree with the 500-mile rule of thumb. They too see trucks capturing significant quantities of traffic in food.

"The shorter the lead time in transportation, the less inventory you have to carry, so you tend to shift from rail to truck because truck is faster," says a spokesman for Del Monte Corp., San Francisco. Del Monte switched to trucks for short hauls but, as a high-volume shipper, uses rail for long hauls to its distribution points. "Boxcars are a real bargain," says the spokesman. "It's the irregularities that are maddening—the railroads need passenger schedules for freight."

There are indications that railroads are seeking to cope with the matters of time-sensitivity, smaller loads, and customers' desires to pick up in their own trucks.

CSX's intermodal Orange Blossom Special, which has been running perishables north from Orlando, Fla. to Wilmington, Del. since 1982, is now continuing further north to Conrail's terminal at Kearney, N.J.—closer to the New York area. The train leaves from Orlando six days a week and reaches its destination in a little more than 25 hours. Where it was once restricted to Florida's harvesting season, the train is now scheduled to run year-round to handle all commodities.

Burlington Northern is running 10 "Expediter Service" intermodal trains among seven major terminal points. "We're going to the customer and saying, 'Tell me what you need and we'll put something together to see if it works,' " says the railroad's William J. DeWitt. Burlington Northern has also been experimenting with 75 insulated cars—which use carbon dioxide rather than mechanical refrigeration units—to carry frozen foods from the upper and far West to a special refrigerated transloading point in Birmingham, Ala. There the refrigerated trailers are transferred for destinations in the Southeast.

Perhaps the entire picture is best summed up by the transportation and warehousing manager of a large Midwest shipper of bulk commodities.

"In the old days, the railroads handled a lot of business at unprofitable levels, and they handled a lot at very profitable levels," he says. "Now, under deregulation, we can be more like business partners. Railroads are suppliers—suppliers of transportation—to us. They can be market-sensitive, and we hope to give them the opportunity for mutually-profitable operations."

CHANGING TRANSPORTATION ENVIRONMENT: RAIL COMMODITY MIX

Commodity	Tons Originated as % of Total		
	1975	1980	1984
Field crops	9.3	10.3	10.3
Iron ores	6.4	5.7	4.7
Coal	29.0	34.8	39.6
Crushed stone	3.5	—	2.6
Sand and gravel	2.9	—	—
Fertilizer	3.9	4.0	3.4
Grain mill products	2.9	—	—
Forest products	4.6	4.3	—
Chemicals	3.8	4.1	4.4
Steel	2.9	2.9	—
Waste and scrap	2.7	—	—
Miscellaneous shipments	—	—	2.8
Percent of total	79.1	66.2	67.8
Originated tons (billions)	1.4	1.5	1.4

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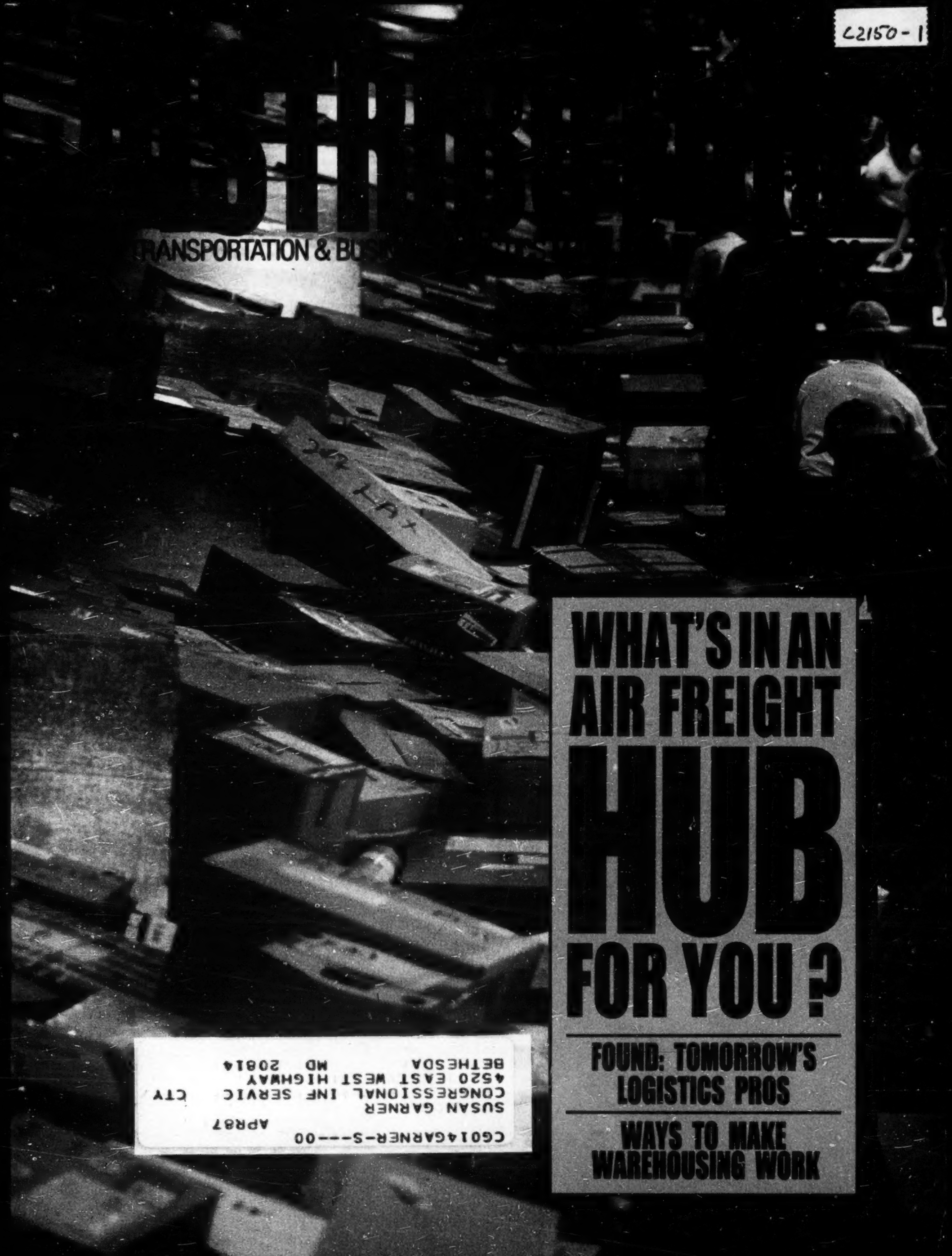
TRANSPORTATION & BUS



WHAT'S IN AN AIR FREIGHT HUB FOR YOU?

FOUND: TOMORROW'S LOGISTICS PROS

WAYS TO MAKE WAREHOUSING WORK

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SUSAN GARNER
CONGRESSIONAL INF SERVIC CTY
4520 EAST WEST HIGHWAY
BETHESDA MD 20814

VOL. 85, NO. 5

CHILTON'S

DISTRIBUTION

MAY 1986

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How losing some sleep can win you peace of mind about your air carriers and your own air errors.

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Seven people. Various ages, various jobs. All of them defining what the "logistics professional" of tomorrow will be. What do they all say? "I got into it by accident" and "I love coming to work every day." Each of these logistics pros has a story to tell.

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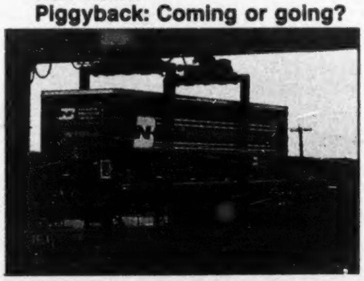
Piggyback: Coming or going?



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Our March question asked what you thought transportation/distribution's role in site locations should be. *Not surprisingly, many of you said that transportation departments should be contacted early on in the site location decision-making process. You asked, 'What good is an inexpensive site if it doubles your transportation costs?' It was good to see that many respondents indicated they have a 'great deal' of input in site location decisions. This is another area where corporations should take advantage of the know-how possessed by their transportation departments. Here's what readers had to say:*

"We should be given the same consideration as sales, marketing and manufacturing. Once a location is selected, transportation/distribution has to make it go."**—Manny Miyar, general manager, Kuehne & Nagel Distribution Services, Elk Grove, Ill.**

"Primary, in that availability of carriers and traffic lanes will severely affect rate levels and service. Management cannot make these decisions without solid input from distribution."**—James J. Paule, traffic manager, Spangler Candy Co., Bryan, Ohio.**

"To provide cost comparisons for both inbound and outbound shipments from each alternative site location."**—Thomas R. Hart, director, worldwide traffic, Burroughs Corp., Wayne, Mich.**

"Our recommendations, pro or con, should be given serious consideration. It is one thing to find an inexpensive site to purchase; another to pay premium transportation costs because of the location."**—John Satterfield, distribution supervisor, Kingston-Warren Corp., Newfields, NH.**

"Logistics, service factors and transportation costs are functions too important to ignore. A prudent decision cannot be rendered unless these three factors are clear to all concerned."**—James J. O'Donnell, manager, transportation, Amchem Products, Inc., Ambler, PA.**

"Our role should be extensive, since the proper location can save thousands of dollars per month in shipping costs."**—Robert E. Brownell, traffic manager, The Korex Co., Wixom, MI.**

"(Sites should be) evaluated on the basis of individual corporate requirements to expedite receipts and shipments in targeted markets."**—Raul A. Quadros, director, internat'l transportation, Pier 1 Imports, Ft. Worth, TX.**

"With the high cost of transportation affecting the bottom line, the clos-

continued

QUESTION OF THE MONTH

WHAT PRICE PEACE OF MIND?

There is an insurance crisis brewing in nearly all segments of American industry today. Premiums for almost every kind of insurance are going through the roof. Companies are increasingly looking toward self-insurance as an alternative.

It is no secret that this crisis has perhaps hit the transportation industry the hardest. Witness the number of carriers that have closed their doors in the past 12 to 18 months.

We'd like to find out how the insurance crunch has affected shippers, specifically in one area—security. Cargo/inventory theft represents a significant loss for some companies. Is your company one of them? How does your company insure against theft loss? Do you purchase insurance or insure yourself? What is the difference in cost?

Who in your company is responsible for cargo security? The transportation department? Security? Operations? Administration? What is being done to fight theft problems? Does your company plan to upgrade its security systems or purchase a new system? What type? Let us know by answering the questions on the card below.

DIALOGUE

May 1986

- My company has experienced (circle one):
an increase/a decrease/no change
in cargo and inventory-related theft in the past two years.
- Last year, cargo/inventory theft's cost to my company's bottom line was: $ ____________
- The primary responsibility for cargo/inventory security within my company lies with (check one only):
  - ________operations/production dept.
  - ________transportation/distribution dept.
  - ________administration/personnel
  - ________other (describe):____________
- Freight/inventory theft within my company most often takes this form (check one only):
  - ________stealing from shop floors and loading/receiving docks at manufacturing sites
  - ________stealing from warehouses/distribution centers
  - ________in-transit theft
  - ________other (describe):____________
- My company insures against cargo theft with:
  - ________a corporate umbrella policy
  - ________a separate policy for cargo theft
  - ________self-insurance against cargo theft

The greatest contribution a transportation/distribution manager can make to help reduce cargo/inventory theft is:

____

____

____

____

NAME (print) ____________ TITLE ____________

COMPANY ____________ PHONE ____________

ADDRESS ____________

CITY ____________ STATE ____________ ZIP ____________

FIGURES IN SPEECH

(Quotes from transportation and distribution notables that have caught the ears of *DISTRIBUTION* editors:)

"Unlike CSX and BN, we'd just be happy to stay a railroad, let alone be a multi-modal company."—**Gordon H. Kuhn, assistant vp, Conrail.**

•

"It is apparent that deregulation of our nation's railroads has worked better than anyone dared hope. Shippers have good rail service, an adequate car supply and rate stability. Congress set a whole new course of direction with the implementation of the Staggers Act. Passage of the CURE bill will stifle market-based negotiations and send all the wrong signals to railroad investors."—**William Shaw, Committee Against Revising Staggers.**

•

"Although our port facilities are among the finest in the world they must be improved to meet the requirements of the future. Recent regulatory and technological changes—particularly the introduction of the new and much larger containerships—have caused us to look more closely at our once revolutionary port facilities. What we find is that many of them require major renovation, modernization and expansion."—**James J. Kirk, director, port dept., Port Authority of New York and New Jersey.**

er to major shipping lanes the easier it is to negotiate a better rate."—**R. Siegfried, traffic manager, Eagle Gant Corp., Allentown, PA.**

"To study all the costs involved, service capabilities and standards, established carriers, and proximity to customers in a given region."—**Rich De Santis, traffic manager, Lumex, Inc., Bay Shore, NY.**

"Transportation's role should be great. After all, we must get the raw material to the plant and the finished product to the customer at the lowest possible cost—and always on time."—**Howard Whitaker, traffic manager, Georgia Pacific Corp., Palatka, Fla.**

SETTING YOUR SITES

Company has opened a new facility, or relocated an existing one within past two years	89%
Company has not opened a new facility or relocated an existing one within two years	11%
The major reasons for selecting the new location were:	
proximity to customers	73%
local transportation network	47%
cost of labor	27%
tax advantages	27%
proximity to suppliers	13%
Amount of input transportation/distribution manager has in site location decisions:	
a great deal	37%
some	47%
very little	16%
Which department has the most influence in site location decisions?	
executive	53%
transportation/distribution	21%
marketing	21%
finance	16%
production	5%

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8

SECOND QUARTER

FORECAST

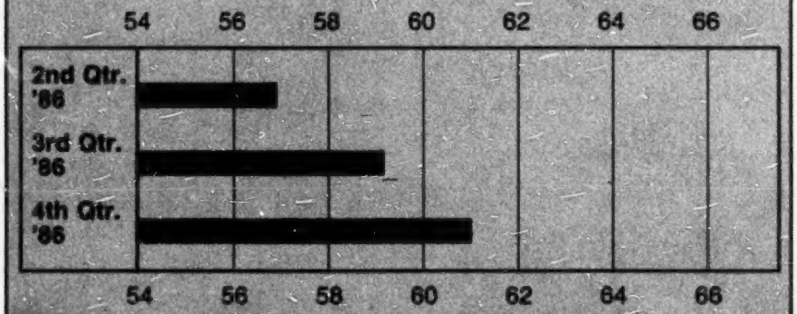
The outlook for the economy in the upcoming months is more than most economists dared dream of in months past

By Richard Lancioni, Ph.D., Contributing Editor

GENERAL ECONOMIC INDICATORS 1986 FORECAST

	2nd QTR.	3rd QTR.	4th QTR.
Real GNP (billions)	$4,183.6	$4,256.6	$4,322.3
Retail Car Sales (millions of units, annual rate)	10.5	10.8	10.9
Housing Starts (1000s of units, annual rate)	1.85	1.96	2.01
Prime Rate (%)	9.1	9.0	8.7
Personal Income (billions)	$3,455.0	$3,507.6	$3,558.8
Inflation Rate (%)	2.5	3.3	3.6
Unemployment Rate (%)	6.9	6.8	6.7
Net Exports (billions of $) annual rate)	(86.2)	(84.9)	(80.2)
Factory Utilization (%)	79.4	79.6	80.7

PURCHASING MANAGERS COMPOSITE INDEX 1986 FORECAST



Grow, grow, grow! These seem to be the words of most economists as they look at 1986. Forecasters have revised their estimates for the year. The stock market recently broke through the 1800 level to reach new highs and inflation seems to be a non-issue in the economic scheme of things. GNP is expected to reach $4,183.6 billion in the second quarter and grow at a rate of more than four percent through the third and fourth quarters. Housing starts are expected to reach all-time highs with the introduction of single-digit mortgage rates; and the prime rate is expected to drop to the 8.7 percent level by the fourth quarter. Unemployment is also declining and should dip below 6.7 percent by the end of 1986. Factory utilization will remain high, averaging approximately 80 percent for the balance of the year.

The real negative in the economic picture continues to be the balance of trade figures, with net exports averaging a negative $80 billion for all of 1986. This should improve somewhat as the dollar declines further. Inflation should remain constant or decline over time as the price of oil continues to fall.

Distribution Index

The distribution sector of the economy will remain strong during the second quarter, following trends in the overall economy. Truck shipments will increase and reach the 148.1 level in the third quarter, while rail movements will also rise to reach the 129.9 level in the fourth quarter. Air freight should expand rapidly and reach the 138.6 level at the end of the year. Water ship-

continued

SECOND QUARTER

DISTRIBUTION INDEX—1986 FORECAST

	2nd QTR.	3rd QTR	4th QTR.
Truck Shipments	146.9	148.1	149.9
Rail Shipments	126.9	128.1	129.9
Air Shipments	135.5	137.7	138.6
Water Shipments	118.3	120.2	121.7
Warehouse Space Utilization	132.0	133.5	134.6
Inventory Valuation	112.4	111.1	110.8

DIESEL FUEL PRICES—1986 FORECAST (cents per gallon)

	2nd QTR.	3rd QTR.	4th QTR.
Full-Serve	118.9	109.1	90.1
Self-Serve	109.7	95.1	88.0

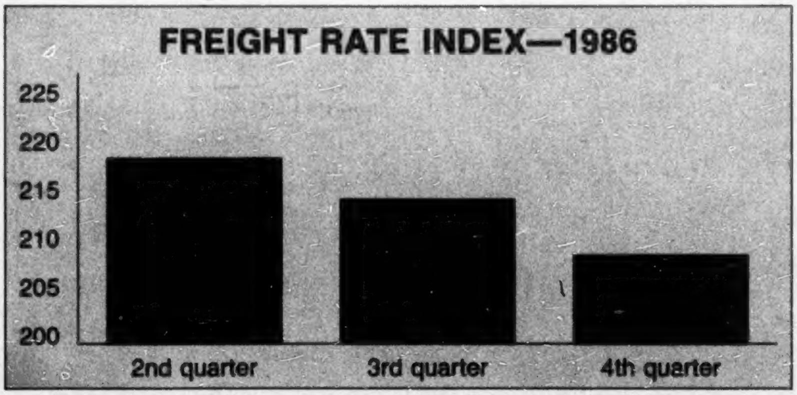
Source: Household Goods Carriers Bureau. Figures are estimates calculated by author.

TRANSPORTATION COST INDEXES (1977=100.0)

	2nd QTR.	3rd QTR.	4th QTR.
Rail	184.9	185.1	185.8
Truck	173.8	172.0	172.0
Barge	187.5	186.6	185.9

Source: Data Resources Inc.

FREIGHT RATE INDEX—1986



ments, which typically advance at a slower rate than the rest of the transport sector, should increase to 121.7.

Inventory stocks should begin to be rebuilt in the second quarter—reflected in a rise in the warehouse utilization rate to the 133.5 level by the end of the third quarter. The inflation rate, which will moderate to the three percent level during the third quarter, is reflected in the drop in inventory valuation to the 111.1 level during the same period. As one distribution manager says, "The decline my company has experienced in its pricing structure during the past three months will continue for the rest of 1986."

Diesel Fuel Prices and Transportation Costs

The balance of 1986 will provide the transportation industry with one of the steepest declines in oil and gasoline prices since the late 1960s. Diesel fuel prices will fall below a dollar per gallon by the end of the second quarter, and reach the $.60 to $.80 range by the third quarter. This will result in lower transportation costs for all modes, including rail, truck, and barge. Transportation costs could decline by as much as 15 percent by the end of 1986.

Purchasing Managers Composite Index

Confidence in the economy should continue with a surge in orders for capital goods, accessory equipment, raw materials, and component parts. Purchasing managers should remain confident and increase their orders through the second quarter. If inflation and interest rates continue to decline, orders for new plants and new equipment should grow through the balance of the year.

As the second quarter ends, the economic growth in the second half of the year should remain steady and inflation-free. As one distribution manager says, "Confidence is the name of the game. And right now my company's management is very confident about the future." ☐

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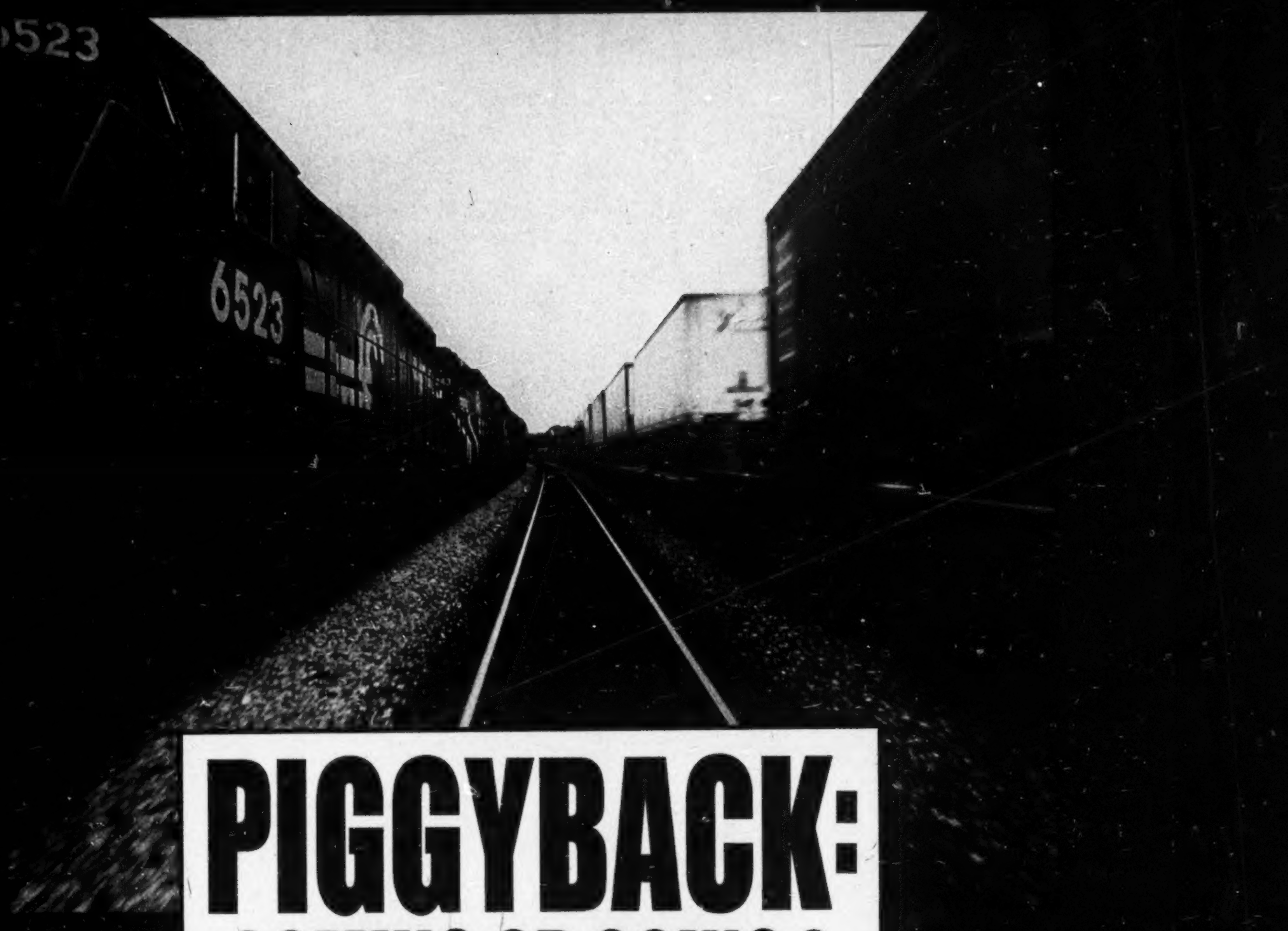

PIGGYBACK: COMING OR GOING?

R QUALITY:
OBSESSION ?

ELPS SET THE SITES

REASONS BEHIND REGIONAL TRUCKING

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VOL. 85, NO. 6

CHILTON'S

DISTRIBUTION

JUNE 1986

COVER STORY

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Building a sound distribution network is not a hit-or-miss affair. Here are some companies that really know how to set their sites.

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DIALOGUE

SQUEALING ON PIGGYBACK

Our April Dialogue question asked what it would take to get more shippers to use piggyback and other intermodal services. Responses indicate that the extent to which these service options are utilized by shippers varies widely. Shippers have no problem pointing out shortcomings. But despite some nagging problems, the consensus is that intermodal services are still going through a "sorting out" phase, and that the future looks promising. For more on the future of piggyback, see this month's cover story starting on p. 10.

"I want quick reaction by the consolidator to my needs. He knows what I need and when I need it. It's the same as a short-haul truck. The reaction is immediate. It is the only way to long-haul our material. It's been 40 years coming, but it's here." **—Jack Shepherd, traffic manager, UBrand Corp., Shelby, Oh.**

The amount of total annual freight volume accounted for by intermodal services is:	
mean	15%
mode	20%
median	32%
The amount of total annual freight bill accounted for by intermodal services is:	
mean	12%
mode	1%
median	24%
Intermodalism still has a great future	82%
Intermodalism has peaked and will continue to serve shippers' needs at close to current levels	6%
Intermodalism will backslide in years to come until it is reduced to gimmick status	6%
Problems that occur with intermodal service are usually because of:	
confusion over carrier responsibility and communications	53%
equipment unavailability or incompatibility	47%
inadequate departure schedules and in-transit delays	35%
excessive handling, increased loss and damage	24%

QUESTION OF THE MONTH

TAKING STOCK OF INVENTORY CONTROL

Just-in-time and zero inventory management are hard enough to master during periods of normal activity. What happens when things start to get a little crazy?

Inventory fluctuations can be caused by any of a number of factors. Maybe your business is seasonal. Maybe your company is rolling out a new product. Maybe you're recalling a product. Maybe your marketing people are just plain doing a good job, and the demand for your product has soared.

Many companies are jumping onto the inventory control bandwagon with systems like the much-imitated *kanban* process pioneered by the Japanese. Others are using sophisticated forecasting and materials requirements software packages to help keep stocks to a minimum.

What is your biggest inventory control problem? Do you have more difficulty with the inbound or outbound part of your operation? How do you go about preparing for inventory fluctuations? Has your company determined optimum levels of safety stock? What are they? How has JIT affected your inventory management? Let us know on the card below.

DIALOGUE

June 1986

- The greatest inventory challenge for my operation is caused by (check ONE only): ______seasonality; ______non-seasonal demand fluctuations; ______new product introductions or product line changes; ______new marketing strategies (promotions, packaging changes, etc.); ______discontinuations; ______recalls; ______other (describe): ____________________
- Seasonality and other inventory aberrations create the greatest challenge in the (check ONE only) ______inbound/ ______work-in-process/______outbound segment of the logistics pipeline.
- To prepare for predictable changes in demand for our products, we begin making appropriate inventory adjustments ________days in advance of the projected swing.
- Our desired level of "safety" or "buffer" stock to guard against fluctuations that cannot be measured is ________days for production materials and ________days for finished goods.
- Just-In-Time manufacturing and distribution has made it (check one) ______harder/______easier to cope with seasonality and other demand swings.
- In the past two years, we (check one) ______have/ ______have not had to put a contingency plan into action to pull

Here are the steps my department takes to be prepared for inventory swings, predictable and unpredictable, up and down:

____

____

____

____

NAME (print) ____________________ TITLE ____________________

COMPANY ____________________ PHONE ____________________

ADDRESS ____

FIGURES IN SPEECH

(Quotes from transportation and distribution notables that have caught the ears of *DISTRIBUTION* editors:)

"Where are the savings that are supposed to result from stack trains? We hear about 40, 50 or 60 percent savings, but we really don't see them as shippers. Certainly not in westbound domestic rates, where we might see 5 or 10 percent reductions at best."—**Lyle Cater, rail intermodal manager, 3M Co.**

•

"At the risk of being charged with heresy and losing the few friends in the transportation fraternity I still have, I suggest that carrier marketers take a hard look at the utility and payback of the traditional annual round of traffic club dinners. At last year's New York Traffic Club dinner I looked up at the sea of headtable guests. Starched and stiff in their penguin-like uniforms, I felt an uncharacteristic pang of sympathy for those carrier officials that would be subjected to this same ritual again and again in cities throughout the nation. As the obligatory introductions and ceremonials droned on, I could not help but wonder if this was not the classic anachronism of the modern age."—**Fred M. Zitto, manager, U.S. distribution operations, International Paper Co.**

"Because of increased price competition from motor services through the use of 48' cube trailers and pups, railroads must introduce advanced equipment at a competitive, *not* premium price. Failure to do so will result in the erosion of the low-density shipping market."—**Robert J. Cox, traffic manager, Wright Line, Inc., Worcester, Mass.**

"We need accurate tracing procedures, updated billing methods, more ethical drayage companies and more dedicated piggyback trains."—**R.J. Marshall, Jr., traffic manager, Duraco Products, Inc., Streamwood, Ill.**

"Better access to rail facilities and better delivery schedules at the other end will prompt shippers to use more intermodal services."—**Ed Loftus, dist/trans manager, Ampex Corp., Opelika, Ala.**

"Carriers need to accept liability for cargo damage. They must offer a wider range of equipment and services, such as reefer equipment, and pallet exchange or return without the consignee having to accumulate them. Carriers also should give better notification of delays, and employ better sales forces. Finally, rate stability would enhance shippers' desire to use TOFC or other intermodal modes."—**Robert G. McCormick, assistant director of distribution, Bunge Edible Oil Corp., Kankakee, Ill.**

"The animosity between the rail and trucking industries must be erased if further growth is to continue. Congress can help the situation by equalizing taxes and subsidies."—**Dan Antell, traffic manager, Rheem Manufacturing, A/C Div., Fort Smith, Ariz.**

"Make landbridge services cheaper so fewer shippers will bypass the service and use an all-water route—which takes a little longer, but is less costly. Railroad companies have to share the costs of steamship companies for the inland portion."—**Guy Russo, executive vp, Nippon Industries, New York.**

"What is needed is the responsible attitude toward service that is achieved by the rail and trucking industries when operating separately."—**D. Mobley, traffic manager, Roseburg Forest Products Co., Roseburg, Ore.**

"Cheap transportation, reliable convergement and industry professionalism will make intermodal more attractive."—**Timothy Saul, manager, materials control/traffic, Tecumseh, Verona, Miss.**

"Consistent transit times, better communication between all parties and an image boost for the railroads and water carriers will help make intermodal a more viable transportation option."—**Bob Brownell, traffic manager, Korex Co., Wixom, Mo.**

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CHILTON'S

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THE TRANSPORTATION & BUSINESS LOGISTICS MAGAZINE AUGUST 1986

QUEST FOR QUALITY
EXCELLENCE IN TRANSPORTATION AND LOGISTICS MANAGEMENT

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BETHESDA MD 20814

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VOL. 85, NO. 8

CHILTON'S

DISTRIBUTION

AUGUST 1986

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The nation's shippers identify those carriers that have moved ahead of the pack in quality. Then, *DISTRIBUTION's* look at excellence continues in our feature "Profiles in Conformance," described below.

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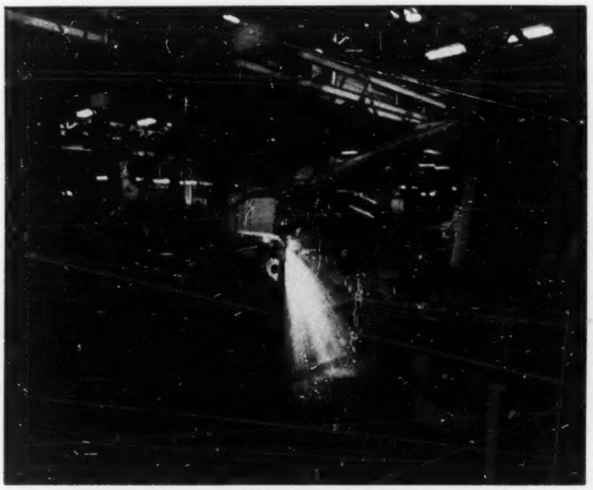

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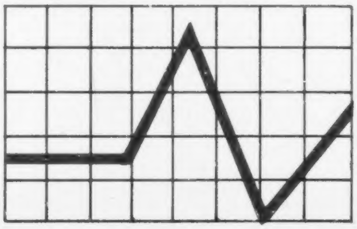

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DIALOGUE

SECURITY CHECK

As a transportation/distribution manager, what can you do to help control cargo and inventory theft? That's what our May Dialogue question asked, and answers ranged from common sense basics (eliminating theft opportunities, tighter controls) to more complex solutions (Stay with your goods at all times!). You also said that theft can take any form – stealing in-transit or from shop floors, loading docks, manufacturing sites, warehouses or distribution centers. But most of you agreed there are some relatively simple things – short of staying with your goods at all times – that can be done to cut down on theft. Here's what you had to say.

"Establish a policy and procedures to control all logistical theft opportunities within the organization and hold managers accountable for losses." – **Joe Lyman, general manager, Dunkin' Donuts, Inc., Thorofare, NJ.**

"Know your product and use only carriers with insurance and proven track records." – **Brett Smith, plant manager, Linkwood Truss Systems, Mansfield, TX.**

continued

My company has experienced:	
no change in the incidence of cargo/inventory theft in the past two years	67%
an increase in theft in the last two years	17%
a decrease in theft in the past two years	17%
The primary responsibility for cargo/inventory security within my company lies with:	
the operations/production dept.	50%
the transportation/distribution dept.	33%
administration/personnel	17%
Freight/inventory theft most often takes the form of:	
in-transit theft	33%
stealing from warehouses/distribution centers	25%
stealing from shop floors and loading/receiving docks at manufacturing sites	17%
My company insures against cargo theft with:	
a corporate umbrella policy	83%
self-insurance	13%

QUESTION OF THE MONTH

TRANSPORTATION CHECKS AND BALANCES

Just as word comes from Washington that the executive branch is tiring of the Conrail disposal controversy, sentiment is mounting for the government to loosen its grip on other transportation entities such as the U.S. Postal Service and Amtrak. Washington's self-appointed watchdog, the General Accounting Office, continues to crank out reports that indicate the government is about as adept at operating transportation entities as it is at balancing its checkbook.

Beyond its direct involvement in operations like the USPS, Amtrak and Conrail, the government also plays a large behind-the-scenes role in other transportation areas, through shipbuilding and operating subsidies to U.S.-flag ocean carriers and subsidization of airports, ports, waterways, and highways.

All things considered, do you feel *your* operation is better off, from a cost and service standpoint, because of the government's involvement? Or should the government get out of the picture? On the card below, tell us just how much of an operating role you'd like to see the government have in transportation. Remember, we're not talking about regulation here – that's a different can of worms.

DIALOGUE

August 1986

- I would like to see the Postal Service:

______become completely privatized
______be forced to privatize in unprofitable areas
______continue to make its own privatization choices

- I would like to see Amtrak:

______become completely privatized
______be forced to privatize in unprofitable areas
______continue to make its own privatization choices

- I would like to see the federal government ______decrease/ ______increase the amount of support it provides to the ocean shipping industry through shipbuilding and operating subsidies

- I would like to see the federal government ______decrease/ ______increase its financial involvement tied to transportation facilities such as highways, airports, ports, waterways, etc.

- Final disposition of the Conrail question **should** see

______a complete sale to Norfolk Southern or another bidder
______a public stock sale
______a continuation of the status quo, with the government retaining its holdings

- I am ______in favor/______opposed to increased user fees to help the government absorb the costs it entails in transportation areas.

7

The federal government's proper **operating** role with respect to transportation entities like Conrail, the USPS, Amtrak, steamship lines, etc., should be:

____
____
____
____

NAME (print) TITLE
COMPANY PHONE
ADDRESS
CITY STATE ZIP

FIGURES IN SPEECH

(Quotes from transportation and distribution notables that have caught the ears of *DISTRIBUTION* editors:)

"Just as the LTL trucker is influencing the TOFC business, the steamship industry now is directing the COFC business. Stack trains can represent some important economic advances for the railroad industry – somewhere down the road when the current fleet of conventional piggyback flatcars is closer to full depreciation. But right now, stack trains are a solution to the steamship operator's problems, not the railroad's. For the rail industry and its domestic shipper base, stack trains may be creating more problems than they solve." – **Harry J. Bruce, chairman and ceo, Illinois Central Gulf Railroad.**

•

"Speaking for ACL, I do *not* want to provide rail services. From what I have seen the past three years, I am convinced that no ocean carrier can possibly operate a train service as well as the railroads now do. We are now getting second morning delivery into Chicago at reasonable prices. Could we handle the job as well? Not at all. My objective is to use the best of what is out there, a concept I call 'mixing and matching.' " – **Daniel J. Kerrigan, president, Atlantic Container Line-U.S.A.**

"Be a good example, be fair but strict, and prosecute anyone caught stealing." – **Louis A. Paulsen, distribution manager, Sundor Brands, Darien, CT.**

"You need to establish good controls on issues receipts and to lower incidental traffic through warehouse and shipping areas." – **T. R. Yauch, materials manager, Valin Corporation, Sunnyvale, CA.**

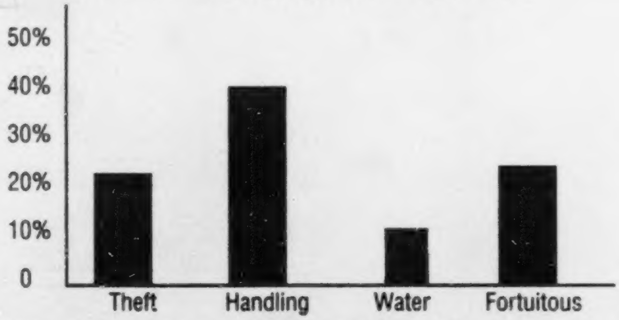
"Select the right carriers." – **J. Alvarez, director of transportation, Burdine's, Miami, FL.**

"(Adopt) a quality control process in the department when shipping documents are to be generated and when (cargo) is going out the door. This is a proven tactic if it can be implemented." – **Patrick Riley, traffic manager, American Computer Hardware Corporation, Santa Ana, CA.**

"Stay with your goods at all times!" – **C. McDale, manager, Apex Truck & Mail Co., St. Louis, MO.**

"Strict control of access to inventory locations, security packaging to detect shipment tampering and refresher training for material handling units." – **R. L. McDill, director of logistics, Ericsson Inc, Anaheim, CA.**

INCIDENCE OF CARGO LOSS: 1978-1982



Analysis of cargo losses reported to the CIGNA insurance firm over a five-year period indicate that approximately 75 percent are preventable. Of these, 21 percent were caused by theft. This figure represents nearly one third of all preventable losses, and nearly one quarter of losses in general.
Source: CIGNA

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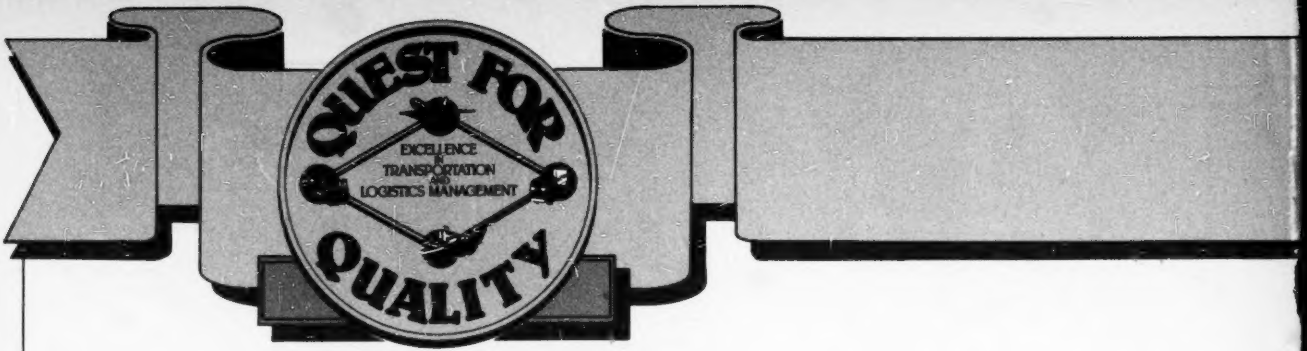
QUEST FOR QUALITY
EXCELLENCE IN TRANSPORTATION AND LOGISTICS MANAGEMENT

The nation's shippers identify those carriers that have moved ahead of the pack in quality.

Ever since DISTRIBUTION introduced the Carrier Marketing Awards program three years ago, its purpose has been to single out for recognition those carriers that have:

- identified market needs and developed truly innovative product lines to meet those needs;
- backed those products with dependable performance and essential follow-up services;
- trimmed operating costs to be able to offer the products at reasonable, affordable prices;
- kept customers informed about the products' capabilities with effective, timely advertising and other forms of promotional communication.

This year over 1200 shippers participated in the study.

The areas measured were:

- Service – transit time, routing, equipment
- Convenience – billing, EDI, tracing, claims settlement
- Price – rates, contracts
- Promotion – advertising, direct mail, service guides
- Sales force – knowledge of services and customers' needs

Because quality is a very subjective measure, this year DISTRIBUTION has changed the methodology to a more quantitative approach.

Separate questionnaires for each major mode of transportation were bound into issues of DISTRIBUTION and supplemented by mailings to shippers with the appropriate buying influence. Each questionnaire contained a list of carriers with ample space for write-ins.

Using an assigned value scale that ranged from 0 (unacceptable) to 5 (outstanding), study participants rated each carrier they used.

A carrier's rating in a category was determined by multiplying the number of votes by their point values. Total points were then divided by the number of shippers evaluating the carrier to find the average. For example, under "service" XYZ Company received this rating:

Range	Respondents	Value
0	10	0
1	3	3
2	9	18
3	2	6
4	23	72
5	11	55
	58	154

Average: 2.655

Category averages are the sum of all carrier averages divided by the number of carriers studied in the section.

The charts on the following pages include only those carriers who received statistically measurable results. Above-average scores are shown in bold. In categories where the average fell below three, only those carriers achieving a higher score are shown in bold.

As several shippers and carriers have pointed out, promotion budgets are closely tied to carrier size. The larger the carrier, the more dollars that are available for advertising, direct mail, etc. Study results confirmed this, so promotion has been removed from the comparisons.

The Award Winners
Outstanding in All Categories
(in alphabetical order)

Allied Van Lines
British Airways
Burlington Northern Air Freight
CW Transport
Canadian Pacific
Carolina Freight Carriers
Cast North America
Clipper Exxpress
Consolidated Freightways
Florida East Coast
GATX
Hapag Lloyd
Holmes Transportation
Jones Truck Lines
KLM
Kinetetsu World Express
Maersk
Mayflower
Missouri—Kansas—Texas
NYK Line
National Piggyback
OOCL—Seapac
Preston Trucking
Profit Air Freight
Roadway Express
Southeastern Freight Lines
Stoop's Express
TNT Holland
Trans Freight Lines
Union Pacific
WTC AirFreight
Wheaton Van Lines
YS Line
Yellow Freight

AIR FREIGHT

Although study after study shows the shipper to be the key decision-market in carrier selection, air carriers concentrate their sales and marketing efforts among air freight forwarders. The result: shippers give airlines lower marks in almost every category. It is interesting to note that international carriers generally rank higher than domestic. Clearly, stronger lines of communication need to be built.

In a separate study, DISTRIBUTION's readers with air freight buying influence reported that 50 percent had never been called on by an air carrier sales rep; only 18 percent had never been called on by an air forwarder rep. In this study, air forwarders get the highest marks for effective sales force. The more consumer-oriented express services walk away with the gold in convenience and price.

CARRIERS

	SERVICE	CONVENIENCE	PRICE	SALES
AVERAGE	**3.305**	**3.181**	**3.149**	**2.379**
Air Canada	**3.391**	2.652	2.782	2.043
Air France	**3.833**	**3.666**	**3.611**	**2.944**
American Airlines	3.195	2.978	3.000	**2.434**
British Airways	**3.600**	**3.333**	**3.466**	**3.000**
British Caledonian	2.428	1.857	2.285	1.571
China Airlines	3.250	**4.250**	**4.500**	**2.750**
Continental Airlines	3.280	2.791	2.916	2.250
Delta Airlines	1.974	**3.256**	3.076	2.282
Eastern Airlines	2.864	2.783	3.000	2.054
Emery	**3.400**	**3.419**	2.720	**2.612**
Federal Express	**4.353**	**4.069**	**3.246**	**2.946**
Flying Tiger	3.012	2.817	2.902	**2.524**
Frontier Airlines	2.100	2.200	2.600	1.600
Japan Airlines	**4.133**	**4.000**	**3.400**	**2.800**
KLM	**3.600**	**3.466**	**3.400**	**3.000**
Korean Airlines	**3.900**	**3.500**	**3.200**	2.100
Lufthansa	**3.880**	**3.640**	**3.480**	**2.840**
Northwest Orient	**3.375**	3.041	3.083	2.250
Pan American	2.450	2.650	**3.150**	1.500
Piedmont	**3.785**	**3.642**	3.000	2.285
Republic	3.296	2.888	3.037	2.148
Qantas	**3.636**	**3.273**	3.000	2.273
TWA	3.107	2.928	**3.178**	**2.392**
USAir	**3.600**	3.133	**3.333**	**2.400**
United Airlines	**3.522**	**3.295**	**3.227**	**2.522**
Western Airlines	**3.391**	**3.260**	3.130	2.217

AIR FORWARDERS

	SERVICE	CONVENIENCE	PRICE	SALES
AVERAGE	**3.201**	**3.094**	**3.001**	**2.784**
Airborne Express	**3.329**	**3.250**	2.988	2.625
Air Express Int'l	3.000	2.951	2.878	2.317
AFSAC	3.166	2.750	**3.083**	**2.667**
Amerford Int'l	3.160	2.920	2.880	2.640
Associated Air Frt.	2.562	2.437	2.500	2.125
BNAFI	**3.277**	**3.291**	**3.166**	**3.222**
CF Airfreight	3.072	**3.145**	2.968	2.958
Circle Airfreight	3.038	3.000	2.962	2.769
Emery Worldwide	**3.486**	**3.360**	2.883	2.721
Kintetsu	**4.133**	**3.866**	**3.533**	**3.467**
MSAS	**3.333**	**3.200**	2.667	2.267
Northern Air Freight	3.176	3.058	**3.235**	**3.352**
Pilot Air Freight	2.722	2.916	**3.028**	2.611
Profit Air Freight	**3.238**	**3.142**	**3.286**	**3.119**
Seko Air Freight	3.000	2.933	2.933	**2.800**
TNT Express	**3.250**	**3.125**	2.813	2.563
WTC Airfreight	**3.468**	**3.255**	**3.213**	**3.106**

AIR EXPRESS

	SERVICE	CONVENIENCE	PRICE	SALES
AVERAGE	**3.374**	**3.239**	**3.204**	**2.525**
Airborne Express	**3.467**	3.230	3.155	**2.779**
BNAFI	**3.404**	**3.425**	**3.375**	**3.416**
DHL	**3.500**	**3.230**	3.038	**2.641**
Emery Worldwide	**3.530**	**3.255**	2.989	2.653
Federal Express	**4.408**	**4.097**	3.149	**2.891**
Purolator	2.980	2.900	3.009	2.158
Roadway Package	2.950	3.150	**3.500**	**2.800**
TNT Skypak	3.250	3.083	3.083	2.500
UPS	**3.728**	**3.441**	**3.645**	2.174
USPS	2.532	2.584	3.103	1.246

MOTOR CARRIERS

REGIONAL

	SERVICE	CONVENIENCE	PRICE	SALES
AVERAGE	**3.368**	**3.086**	**3.063**	**2.611**
AAA Cooper	**3.542**	**3.594**	**3.329**	2.414
AAA Trucking	2.927	2.797	2.797	2.217
APA Transport	**3.738**	**3.462**	2.657	**2.852**
Advance Trans.	3.250	**3.120**	**3.340**	2.495
Averitt Express	**3.864**	3.054	2.892	2.432
CW Transport	**3.459**	**3.304**	**3.112**	**3.012**
Central Freight Lines	3.275	2.955	2.536	2.145
Central Transport	2.889	2.808	**3.089**	2.437
Churchill Truck Lines	**3.523**	**3.174**	2.744	2.965
Delta Lines	2.120	1.880	1.920	1.880
Duff Truck Line	3.016	2.967	2.935	2.738
Estes Express	**3.553**	**3.523**	2.985	2.631
ForeWay Express	**3.596**	**3.241**	2.855	2.468
Frederick Transport	3.360	**3.120**	**3.520**	2.040
Gemini	3.157	2.631	3.000	2.389
TNT Holland	**4.158**	**3.619**	**3.151**	**3.159**
Holmes Transportation	**3.583**	**3.263**	**3.153**	**2.801**
Jones Truck Lines	**3.440**	**3.314**	**3.204**	**3.028**
Lynden Transportation	**3.636**	**3.090**	**3.818**	2.909
Midwestern Distribution	3.135	2.864	**3.135**	2.189
Milne Truck Lines (SUN)	3.039	2.974	3.026	2.506
Mistletoe Express	2.520	2.372	2.920	1.959
New Penn Motor Express	**3.587**	**3.262**	2.580	2.563
Old Dominion Freight	3.106	3.061	**3.221**	2.496
Overland Express	**3.563**	**3.127**	2.891	2.582
Poole Truck Line	**3.375**	2.958	**3.583**	2.130
Preston Trucking	**3.502**	**3.341**	**3.208**	**3.069**
RISS International	3.235	**3.117**	**3.265**	2.559
St. Johnsbury	**3.391**	**3.222**	2.717	2.766
Sanborn's	**3.490**	**3.226**	2.953	**3.000**
Schneider	**3.670**	**3.291**	**3.278**	2.722
Southeastern Frt. Lines	**4.140**	**3.857**	**3.440**	**3.020**
Standard	3.019	2.863	2.961	2.608
Stoop's Express	**3.851**	**3.370**	**3.593**	**3.037**
TNT Pilot	3.158	**3.115**	**3.223**	2.914
Thurston	3.062	2.969	**3.197**	2.531
Transus	3.024	2.901	**3.111**	2.506
Viking Freight	**3.785**	**3.557**	2.943	2.757
Watkins Motor Lines	**3.771**	**3.188**	**3.163**	2.880

MOTOR CARRIERS

Since this is the most heavily used mode of transportation, this category had the largest number of carriers studied and the highest shipper participation. To provide a more equitable evaluation, carriers in this category were divided into three groups: transcontinental, regional and specialized (van lines, liquid bulk and truckload).

As DISTRIBUTION reported in June ("Regional Trucking Checks In," p. 28), many shippers find regional carriers more responsive to their service needs. This study confirms that. However, the transcontinentals, helped by their far greater size, ranked highest in convenience. They also lead the group in price sensitivity.

This is the first year that the specialized motor carriers have made an impact in the study. The van lines performed especially well; their broadened base of activities clearly meets a wide variety of shipper needs.

QUEST FOR QUALITY

EXCELLENCE IN TRANSPORTATION AND LOGISTICS MANAGEMENT

MOTOR CARRIERS

TRANSCONTINENTAL

	SERVICE	CONVENIENCE	PRICE	SALES
AVERAGE	**3.276**	**3.261**	**3.253**	**2.961**
ABF	**3.285**	**3.298**	3.139	2.940
American Frt. Sys.	**3.386**	**3.302**	**3.688**	2.972
ANR	2.872	2.815	2.937	2.494
ARA Smith's	3.095	2.290	2.992	2.733
Bowman	2.964	3.000	3.119	2.667
Carolina Frt. Carriers	**3.571**	**3.476**	**3.320**	**3.092**
Consolidated Frtways	**3.444**	**3.619**	**3.413**	**3.317**
Overnite Trans.	**3.633**	**3.383**	**3.457**	2.874
P.I.E. Nationwide	3.102	3.204	3.178	2.907
Roadway	**3.674**	**3.637**	**3.293**	**3.247**
Transcon	3.185	3.014	3.126	**3.009**
Yellow Freight	**3.718**	**3.736**	**3.452**	**3.473**

SPECIALIZED

	SERVICE	CONVENIENCE	PRICE	SALES
AVERAGE	**3.355**	**3.013**	**3.072**	**2.706**
Aero Mayflower	**3.500**	**3.304**	**3.086**	**3.043**
Allied Van Lines	**3.548**	**3.370**	**3.354**	**3.338**
Arkansas Freightways	**4.000**	**3.509**	**3.547**	2.706
Atlas Van Lines	**3.600**	**3.657**	3.028	**3.285**
Burnham Service Co.	2.714	2.285	2.571	2.285
Bekins Van Lines	2.685	2.400	2.400	2.314
CRST	3.255	3.021	2.657	2.489
Chemical Leaman	**3.448**	**3.137**	2.413	2.275
DSI Tank Lines	**3.500**	2.700	3.000	**3.100**
FFE	2.928	2.642	2.500	2.642
J.B. HUNT	**3.485**	**3.114**	**3.542**	2.628
ICCC (Ryder)	2.933	2.666	**3.433**	2.300
INWAY (IU)	3.153	2.884	**3.192**	2.538
Leaseway	2.941	2.676	2.705	2.441
Manfredi	**4.166**	**3.500**	**3.666**	2.166
Matlack	**3.421**	**3.236**	2.973	2.657
National Van Lines	2.500	2.125	2.375	2.375
North Am. Van Lines	3.300	3.232	**3.261**	2.821
Ranger (IU)	**4.365**	**3.170**	**3.219**	2.487
Wheaton	**3.625**	**3.625**	**3.625**	**3.750**

Who is Number One?

Each shipper has his or her own ranking and weighting for the four carrier characteristics reported: Service, convenience, price and sales effectiveness. Before you can calculate which carrier has the best "performance profile" for you, you have to determine your list of priorities.

The simplest way to do this is to assign weighted point values to the four characteristics. For instance, take a total of 10 points and assign the appropriate weighting to service, price, convenience and sales effectiveness based on their importance to you. If service is most important, that might receive four points. If price is next, that might be three. Convenience might get two and sales, one. This weighting will vary from one shipper to the next and from one mode to the next.

After you have determined your weightings, multiply them times the reported scores for the various carriers. The carrier with the highest total of points after all four categories have been extended is the best one for you.

Here's an example. Suppose your weighted scale of carrier characteristics is four for service, three for price, two for convenience and one for sales effectiveness. The extended scores and the total points for the following carrier would be as follows:

	Reported Score	*Weight Factor*	*Extended Score*
XYZ Co.			
	3.000	*4*	*12.000*
	3.100	*3*	*9.300*
	2.800	*2*	*5.600*
	2.500	*1*	*2.500*
Total			*29.400*

QUEST FOR QUALITY

EXCELLENCE IN TRANSPORTATION AND LOGISTICS MANAGEMENT

RAIL CARRIERS

CARRIERS	SERVICE	CONVENIENCE	PRICE	SALES
AVERAGE	**3.356**	**3.092**	**2.972**	**2.623**
Boston & Maine	1.500	1.167	1.583	2.000
Burlington Northern	**3.629**	**3.387**	**3.339**	2.726
Canadian National	**3.500**	**3.143**	2.857	**3.143**
Canadian Pacific	**3.889**	**3.444**	**3.278**	**3.333**
Chessie System	3.121	2.818	2.879	2.212
Chicago & Northwestern	3.353	**3.147**	**3.294**	2.441
Conrail	**3.423**	**3.269**	2.962	2.519
CSX	3.160	3.000	3.000	2.400
Denver & Rio Grande	**3.680**	**3.160**	**3.080**	2.800
Florida East Coast	**4.313**	**4.000**	**3.813**	3.000
Grand Trunk Western	**3.533**	2.800	2.333	2.733
Illinois Central Gulf	3.321	**3.107**	**3.036**	2.071
Kansas City Southern	3.188	3.000	2.750	2.063
Missouri-Kansas-Texas	**3.680**	**3.480**	**3.640**	**3.160**
Norfolk Southern	**3.407**	**3.315**	2.833	**3.148**
St. Louis S'western	2.950	2.850	2.650	2.000
Santa Fe	**3.813**	**3.500**	**3.146**	2.813
Seaboard System	2.977	2.864	2.591	2.159
Soo Line/Milwaukee Road	**3.516**	**3.161**	**3.419**	**2.774**
Southern Pacific	2.801	2.911	2.732	2.429
Union Pacific System	**3.712**	**3.339**	**3.220**	**3.169**

SURFACE FORWARDERS

SURFACE FORWARDERS	SERVICE	CONVENIENCE	PRICE	SALES
AVERAGE	**3.371**	**3.356**	**3.277**	**2.644**
Clipper Exxpress	**3.429**	**3.786**	**3.714**	**3.143**
Hub City Terminals	**3.500**	**3.455**	3.227	2.273
Intermodal Transport	3.364	3.091	3.000	2.545
ITOFCA	3.294	3.176	3.000	2.412
National Piggyback	**3.731**	**3.808**	**3.538**	**3.308**
Wescar Freight Systems	2.909	2.818	3.182	2.182

RAIL CAR LESSORS

RAIL CAR LESSORS	SERVICE	CONVENIENCE	PRICE	SALES
AVERAGE	**3.416**	**3.420**	**3.447**	**3.246**
ACF	3.333	3.400	**3.467**	2.800
GATX	**3.611**	**3.611**	**3.500**	**3.500**
Union Tank	**3.438**	3.250	3.375	**3.438**

RAIL FREIGHT

The railroads have been on the receiving line for some pretty heavy criticism from shippers in recent years (see "The Big Rail Shippers Speak Out," April, p. 11), but they're working hard to be more sensitive to their customers' requirements. Three railroads made the awards list; four more would have joined the winners' circle had they not been marked down on sales force. In this category, as in almost every other category of the study, sales force was the most heavily marked down element.

Surface forwarders, like their air counterparts, generally scored higher than the carriers. Once again, the weakest element in their marketing efforts was sales staff.

QUEST FOR QUALITY
EXCELLENCE IN TRANSPORTATION AND LOGISTICS MANAGEMENT

OCEAN CARRIERS

CARRIERS	SERVICE	CONVENIENCE	PRICE	SALES
AVERAGE	***3.510***	***3.295***	***3.056***	***3.223***
American Pres. Lines	***4.125***	***3.854***	*3.020*	*3.208*
Atlantic Container Line	***4.227***	***3.954***	*2.954*	***3.500***
Barber Blue Sea	*3.214*	*3.071*	*2.821*	*2.892*
Cast North America	***3.611***	***3.444***	***3.944***	***3.444***
Chilean Lines	*2.846*	*3.000*	*3.000*	*2.230*
Columbus Line	***3.933***	***3.866***	***3.133***	*3.066*
Dart Container	*3.500*	*3.166*	*2.888*	*2.666*
Evergreen	*3.369*	*3.000*	***3.869***	*2.521*
Farrell Lines	*3.071*	*3.071*	*2.642*	*2.428*
Hanjin	*2.882*	*2.764*	***3.176***	*2.647*
Hapag Lloyd	***4.031***	***3.843***	***3.093***	***3.531***
Heogh	*3.375*	***3.125***	*3.000*	*2.000*
Italian Line	*2.800*	*2.500*	*2.400*	*2.300*
Japan Lines	***3.769***	***3.384***	***3.153***	*2.384*
Johnson Scan Star	***3.875***	***3.625***	***3.375***	*2.750*
K Line	***3.846***	***3.384***	*3.000*	*2.846*
Lykes Bros.	*3.240*	*3.000*	***3.240***	*3.040*
Maersk Lines	***4.500***	***4.187***	***3.541***	***3.687***
Matson Navigation	***3.700***	***3.300***	*2.400*	*2.700*
Mitsui O.S.K.	***3.666***	***3.400***	*2.666*	*3.066*
Navieras De Puerto Rico	*3.181*	*2.909*	*2.090*	*2.681*
Nedlloyd Lines	*3.500*	*3.187*	***3.125***	*2.562*
Neptune Orient Lines	*3.200*	*3.066*	***3.133***	*2.200*
NYK Line	***4.000***	***3.642***	***3.285***	***3.428***
OOCL-Seapac	***3.551***	***3.448***	***3.275***	***3.379***
Polish Ocean Lines	*3.500*	*3.375*	***3.750***	*3.125*
Sea Land Service	***3.794***	***3.513***	*3.041*	***3.416***
Trailer Marine Trans.	***3.647***	***3.411***	*2.764*	*3.295*
Trans Freight Lines	***3.764***	***3.352***	***3.352***	***3.411***
United States Lines	*3.415*	*3.245*	*2.905*	*2.924*
Waterman Steamship	*2.000*	*2.125*	*2.125*	*2.500*
Y.S. Line	***3.625***	***3.500***	***3.500***	***3.750***
Zim Container Service	*3.100*	*3.050*	***3.200***	*2.800*

OCEAN FORWARDERS

AVERAGE	***3.383***	***3.265***	***3.174***	***2.192***
Fritz Cos.	***3.526***	***3.421***	*2.631*	***2.947***
F. W. Meyers & Co.	***3.500***	*3.166*	***3.000***	***3.083***
Schenkers Int'l	*3.125*	*3.208*	*2.500*	*2.708*

OCEAN FREIGHT

While the maritime industry may be suffering from the decline in foreign trade, this hasn't resulted in a decline in marketing excellence. More carriers achieved individual ranking of 4-plus in this category than in any other. In both service and sales force professionalism, ocean carriers achieved the highest averages of all modes studied. In fact this is the only mode in which the average ranking for sales force achieved or exceeded a 3.0 (average) ranking. This industry clearly leads in the "quest for quality".

No effort has been made to rank the carriers. That would defeat the purpose of this "pursuit of quality." Instead DISTRIBUTION seeks to create a vehicle for shippers to recognize those carriers that make the extra effort which defines excellence.

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CARRIER FINANCE

THE MANY COLORS OF MONEY

Who saw red and who saw black among motor, rail, air and ocean carriers in 1985? Whose prospects are best for staying in the green? A rainbow of results is presented on the following pages.

A DISTRIBUTION Staff Report

Prepare to be outnumbered.

On the following pages, we present a smorgasbord of statistical information to help you with your ongoing efforts to monitor carrier finances, both for individual companies and for the various modes and the industry as a whole. We've culled this data from a variety of sources, both public and private.

To accompany this main course of numbers, here are some nutshell assessments of the financial health of the four modes covered in this report:

MOTOR CARRIERS

While revenues soared to record levels in 1985, the motor carrier industry, by and large, still had a whale of a fight to remain profitable. The struggle continues today, as lower fuel expenses and other productivity gains are offset by high insurance premiums and continued downward competitive pressures on rates.

As a result, big-name bankruptcies remain a real possibility, and the name of the game is still operating efficiency. In the midst of some frighteningly bad numbers for well-known carriers, there are trucking companies that continue to return impressive earnings and post eye-opening operating ratios. Healthy growth spurts by some relatively new names, particularly "regional" truckers, are also noteworthy. The trend should continue to shake most of the remaining parentheses out of the earnings column and shape a shorter, stronger list of truckers that are all in the black.

RAILROADS

The Interstate Commerce Commission, which would probably call a Big Gulp an "inadequate" thirst-quencher, continues to issue miniscule lists of "revenue adequate" railroads. At this point, though, the railroads look to be the financially healthiest of the carrier industries—the result of "downsizing" and tight control of costs.

The number of Class I railroads has declined from 73 in 1975 to 39 in 1980, and further to 25 in 1985.

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KEY PERFORMERS—TRUCKLINES

LOWEST OPERATING RATIOS

Carrier	Operating Ratio
J.B. Hunt	81.2
New Penn Motor Express	82.9
Werner Enterprises	83.0
A-P-A Transport	83.8
Matador Service, Inc.	84.1
Overnite Transportation	84.8
Northwest Transport Services	86.6
DPD Inc.	86.8
Builder's Transport	86.9
SAIA Motor Freight Line	87.2
Estes Express Lines	87.7
Marten Transport Ltd.	87.8
Kenan Transport	88.0
Holland Motor Express	88.3
Jack Cooper Transport Co.	89.0

RANK BY LINEHAUL CPM

Rank	Carrier	Linehaul CPM ($)
1	Burnham Service Co.	0.50
2	Southeastern Freight Lines	0.60
3	Builder's Transport	0.70
4	Holmes Transportation	0.78
5	A-P-A Transport	0.82
6	Overnite Transportation	0.83
7	Watkins Motor Lines	0.83
8	Contract Freighters Inc.	0.86
9	Pre-Fab Transit	0.86
10	Overland Express	0.88
11	Stoops Express	0.89
12	Midwest Coast Transport	0.90
13	Crete Carrier Corp.	0.91
14	Transus	0.92
15	Interstate Contract Carrier	0.93

CARRIER FINANCE

KEY PERFORMERS—TRUCKLINES

HIGHEST OPERATING RATIOS

Carrier	Operating Ratio
P.I.E. Nationwide	112.3
Midwestern Distribution	110.0
Campbell Sixty-Six Express	108.2
Pilot Freight Carriers	106.6
Duff Truck Line	105.7
Murphy Motor Freight Line	105.3
Mistletoe Express Service	104.4
Interstate Contract Carrier	103.0
Smith's Transfer	102.5
Associated Truck Lines	101.9
Garrett Freightlines	101.7
Matlack	101.6
Thurston Motor Lines	101.3
Paul's Trucking Corp.	101.2
FFE Transportation Services	101.1
Kenosha Auto Transport	101.1

OPERATING REVENUE

Carrier	Operating Revenues	'84 Rank	Net Change
Roadway Express	1,428.8	1	NC
Yellow Frt. System	1,407.1	2	NC
Consolidated Frtways.	1,329.6	3	NC
N. American Van	680.1	5	+1
P.I.E. Nationwide	673.7	4	−1
Overnite Transport.	469.7	7	+1
ABF Freight Systems	419.0	8	+1
Carolina Frt. Carriers	411.9	9	+1
Anchor Motor Frt.	408.3	NR	New
Allied Van Lines	369.7	10	NC
United Van Lines	366.6	11	NC
Smith's Transfer	354.9	12	NC
Transcon Lines	323.5	13	NC
Aero Mayflower	302.8	15	+1
American Freight Sys.	302.2	14	−1

MAJOR MOTOR CARRIERS SELECTED EARNINGS DATA

CARRIER & YEAR		OPERATING REVENUES ($ millions)	NET CARRIER OPERATING INCOME[2] ($ millions)	NET INCOME[3] ($ millions)	REVENUE TONS HAULED[4] (millions)	OPERATING RATIO[5] (percent)	RETURN ON EQUITY LESS INTANGIBLE PROPERTY (%)[6]
AAA	1985	71.9	7.7	4.51	0.63	89.2	25.43
Cooper	1984	66.4	7.3	3.64	0.61	88.9	28.80
ABF	1985	418.9	18.5	9.88	1.89	95.6	54.14
Freight	1984	386.2	15.3	7.92	2.06	96.0	251.41
A-P-A	1985	98.6	17.1	7.40	0.46	82.7	50.93
Transport	1984	97.6	19.7	9.84	0.47	79.8	30.22
Advance	1985	67.2	1.5	0.31	0.65	97.8	11.05
Transportation	1984	66.9	(0.2)	(1.28)	0.74	100.3	-0-
Aero	1985	302.8	12.4	7.38	0.63	95.9	19.74
Mayflower	1984	267.7	14.7	9.41	0.47	94.5	33.86
Allied	1985	370.4	0.8	4.75	0.62	99.8	16.66
Van Lines	1984	353.9	7.3	7.76	0.58	97.9	37.17
American	1985	302.2	3.9	2.78	1.72	98.7	6.85
Freight System	1984	294.6	6.9	4.11	1.61	97.7	11.19
Anchor	1985	408.3	NA	20.62	5.41	92.1	NA
Motor Freight	1984	316.2	NA	9.54	3.64	93.8	NA
Anderson	1985	55.9	2.5	1.91	0.81	95.5	22.99
Trucking	1984	52.7	2.4	1.45	0.85	95.3	20.32
Associated	1985	183.3	(3.1)	(4.46)	1.81	101.7	-0-
Truck Lines	1984	194.0	(13.5)	(12.6)	2.11	107.0	-0-
Atlas	1985	163.0	8.7	(1.07)	0.26	94.6	-0-
Van Lines	1984	162.5	6.7	2.89	0.28	95.8	3.80
Auto	1985	64.7	0.1	(0.87)	0.99	99.8	-0-
Convoy	1984	77.7	3.1	2.10	1.48	95.9	474.72
Bekins	1985	202.3	1.5	1.48	0.32	99.2	4.74
Van Lines	1984	206.8	6.5	4.54	0.34	96.8	17.05
Bowman	1985	166.4	0.3	0.51	1.69	99.8	1.40
Transportation	1984	158.6	2.9	4.08	1.68	98.2	8.06
Brown	1985	182.1	3.3	(1.05)	2.33	98.2	-0-
Transport	1984	171.7	6.5	1.86	2.38	96.2	13.45
Builders	1985	107.7	NA	7.27	4.02	86.9	NA
Transport	1984	79.0	NA	4.15	3.34	89.1	NA
Burnham	1985	88.1	8.8	3.79	0.12	90.0	39.42
Service Co.	1984	78.9	10.5	4.86	0.11	86.7	114.07
C.W.	1985	125.0	0.4	1.71	1.13	99.7	1.11
Transport	1984	131.5	1.6	1.98	1.43	98.8	4.21
Campbell 66	1985	80.4	(6.5)	(6.45)	0.66	108.1	-0-
Express	1984	88.5	(3.5)	(2.13)	0.74	103.9	-0-
Cassens	1985	65.8	0.3	(0.12)	0.66	99.6	-0-
Transport	1984	71.1	0.5	0.57	0.79	99.3	26.68
Carolina	1985	411.9	30.2	14.99	2.34	92.7	26.23
Freight Carriers	1984	373.2	25.5	13.16	2.16	93.2	28.48
Central	1985	193.8	4.8	6.49	2.40	97.5	8.38
Freight Lines	1984	191.2	8.6	8.18	2.48	95.5	12.41
Central	1985	245.1	11.3	1.05	5.29	95.4	32.03
Transport	1984	260.7	9.2	(0.7)	5.46	96.5	32.77
Chemical	1985	161.1	4.9	1.47	5.44	96.9	6.38
Leaman	1984	158.0	3.6	(0.6)	5.53	97.7	-0-
Churchill	1985	90.1	3.4	2.13	0.55	96.2	15.41
Truck Lines	1984	84.9	5.1	2.62	0.58	94.0	26.52
Commercial	1985	176.2	10.1	4.53	2.94	94.3	16.22
Carriers	1984	167.9	9.2	4.40	2.74	94.5	16.98
Complete	1985	255.8	NA	12.56	2.93	90.9	NA
Auto Transit	1984	246.9	NA	11.62	2.88	90.8	NA
Consolidated	1985	1329.6	93.7	59.41	4.98	92.9	13.46
Freightways	1984	1283.7	93.1	62.09	5.03	92.7	15.82
Contract	1985	65.8	NA	2.10	1.22	94.4	NA
Freighters	1984	51.9	NA	3.58	NA	91.2	NA
(Jack) Cooper	1985	120.8	9.2	4.35	1.67	92.4	12.03
Transport	1984	130.8	7.4	8.01	1.78	94.3	38.66
Crete	1985	83.1	3.5	2.77	1.46	95.8	19.29
Carrier Corp.	1984	74.1	4.8	3.28	1.30	93.5	29.61
DPD	1985	75.2	NA	0.04	0.70	86.8	NA
Inc	1984	49.4	NA	0.52	NA	98.0	NA
Dart	1985	62.2	NA	2.43	0.26	94.3	NA
Transit	1984	53.9	NA	1.76	NA	94.6	NA
Duff	1985	55.9	NA	(2.7)	0.88	105.7	NA
Truck Line	1984	57.8	(1.1)	(0.5)	1.03	101.9	28.95
E&L	1985	86.3	2.6	2.14	0.92	97.0	30.02
Transport	1984	76.6	3.9	2.09	0.92	94.8	89.14
Estes	1985	64.5	9.8	4.20	0.76	84.8	31.08
Express Lines	1984	59.0	9.1	4.48	0.75	84.6	40.21
FFE	1985	86.1	(0.7)	(0.43)	0.92	100.8	-0-
Transportation	1984	63.0	0.1	0.14	0.68	[illegible]	2.14
Garrett	1985	166.2	(2.7)	(3.75)	1.08	101.7	-0-
Freightlines	1984	173.8	(4.2)	(6.44)	1.20	102.4	-0-

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MAJOR MOTOR CARRIERS–SELECTED EARNINGS DATA

CARRIER & YEAR		OPERATING REVENUES ($ millions)	NET CARRIER OPERATING INCOME[2] ($ millions)	NET INCOME[3] ($ millions)	REVENUE TONS HAULED[4] (millions)	OPERATING RATIO[5] (percent)	RETURN ON EQUITY LESS INTANGIBLE PROPERTY (%)[6]
Global	1985	72.4	0.4	(0.58)	0.16	99.4	2.16
Van Lines	1984	82.7	2.8	1.32	0.19	96.6	13.82
Graves	1985	68.2	2.3	0.55	0.50	96.6	9.05
Truck Lines	1984	71.4	(1.5)	(2.14)	0.55	102.1	-0-
Groendyke	1985	61.7	1.1	0.25	3.61	98.2	3.36
Transportation	1984	63.0	2.7	1.10	3.73	95.7	10.74
Hall's	1985	158.8	(8.7)	(12.5)	1.02	105.5	-0-
Motor Transit	1984	191.2	(7.1)	(9.98)	1.31	103.7	-0-
Holland Motor	1985	106.6	12.4	7.21	0.92	88.3	39.74
Express	1984	91.0	10.0	5.75	0.79	89.0	27.67
Holmes	1985	59.3	0.6	0.66	0.48	98.9	4.08
Transportation	1984	53.6	(1.1)	0.57	0.52	102.1	4.24
J.B. Hunt	1985	131.5	26.7	16.31	1.84	79.7	60.23
Transport	1984	97.9	24.1	14.14	1.46	75.4	105.20
Hyman	1985	60.2	0.8	0.39	0.47	98.6	16.93
Freightways	1984	51.5	1.5	0.61	0.39	97.0	36.24
Interstate	1985	129.5	NA	(1.28)	1.34	103.0	NA
Contract Car.[7]	1984	71.7	NA	(1.56)	0.88	107.2	NA
Janesville	1985	62.8	NA	3.48	1.10	91.3	NA
Auto Transport	1984	59.4	NA	3.34	0.99	90.7	NA
Jones	1985	98.3	1.9	2.01	1.92	98.1	56.18
Motor Co.	1984	76.6	1.8	2.02	1.52	97.6	129.23
Jones	1985	66.6	1.8	0.72	1.42	97.2	4.10
Transfer	1984	66.7	5.4	2.74	1.36	91.9	40.60
Jones	1985	166.6	10.1	5.43	1.14	93.9	10.40
Truck Lines	1984	152.2	11.4	6.54	1.11	92.5	12.50
Kenosha	1985	56.5	(0.6)	0.12	0.58	101.1	1.29
Auto Transport	1984	60.7	1.3	0.81	0.65	97.9	10.59
Lyons	1985	55.7	0.3	0.01	0.39	99.5	1.80
Transportation	1984	53.2	0.8	0.51	0.40	98.4	7.61
M&G	1985	98.5	3.4	2.70	1.21	96.5	22.89
Convoy	1984	90.6	2.7	1.97	1.11	97.0	18.49
Matador	1985	71.2	NA	6.27	NA	84.1	NA
Service	1984	64.7	NA	5.28	NA	82.3	NA
Matlack	1985	200.2	(3.3)	(5.1)	7.83	101.7	-0-
Inc.	1984	209.0	8.3	2.72	8.70	96.0	7.19
Mercer	1985	60.0	NA	1.01	1.06	96.8	NA
Transportation	1984	49.2	NA	1.19	NA	95.2	NA
Merchants Fast	1985	92.7	1.1	0.27	0.97	98.8	2.58
Motor Lines	1984	95.1	4.9	2.00	0.99	94.8	23.08
Midwest Coast	1985	66.9	2.7	1.44	0.74	96.0	24.68
Transport	1984	60.2	2.2	1.29	0.64	96.4	20.56
Midwestern	1985	99.9	NA	(6.4)	1.81	110.0	NA
Distribution	1984	135.6	(6.9)	(1.3)	1.37	105.2	-0-
Miller	1985	58.4	1.2	0.22	3.75	97.9	6.00
Transporters	1984	57.5	1.0	(0.1)	4.18	98.2	2.14
Milne	1985	99.6	0.7	(0.13)	0.60	99.3	-0-
Truck Lines	1984	99.7	1.4	0.63	0.69	98.6	3.32
Mistletoe	1985	70.0	(2.7)	0.82	0.27	103.9	15.39
Express Service	1984	75.2	0.7	(0.48)	0.22	99.0	-0-
Motor	1985	104.4	1.0	0.38	3.84	99.0	8.27
Convoy	1984	92.9	2.7	2.37	3.53	97.1	104.76
Murphy Motor	1985	82.1	(4.4)	(5.81)	0.65	105.3	-0-
Freight Lines	1984	96.7	(0.1)	(0.82)	0.74	100.1	-0-
National	1985	103.4	1.4	4.89	1.01	98.7	50.16
Freight	1984	89.3	0.9	3.93	1.18	98.9	52.25
New Penn	1985	74.6	12.7	7.46	0.59	82.9	22.92
Motor Express	1984	65.7	10.7	6.64	0.57	83.7	23.98
North American	1985	680.1	15.2	24.62	3.16	97.8	18.17
Van Lines	1984	654.2	28.2	27.72	3.02	95.7	25.24
Northwest	1985	95.7	12.9	7.61	0.45	86.5	30.27
Transport Service	1984	82.8	11.1	6.30	0.41	86.6	34.84
Nu-Car	1985	116.6	5.7	2.02	2.15	95.1	19.73
Carriers	1984	113.3	8.1	3.58	2.11	92.8	67.06
Old Dominion	1985	112.8	0.8	(2.8)	1.38	99.3	-0-
Freight Lines	1984	127.5	0.9	(1.6)	1.70	99.3	-0-
Overland	1985	96.1	NA	(1.9)	1.52	96.5	NA
Express	1984	83.8	NA	0.76	11.3	90.1	NA
Overnite	1985	469.7	71.3	39.02	3.46	84.8	21.49
Transportation	1984	414.4	59.0	33.94	3.58	85.8	21.84
P-I-E	1985	673.7	(83.1)	(96.7)	2.68	112.3	-0-
Nationwide[8]	1984	890.7	(26.3)	(19.7)	3.83	103.0	-0-
Pacific Motor	1985	95.4	0.7	0.49	1.03	99.2	-0-
Trucking	1984	108.9	4.2	2.80	1.19	96.2	-0-
Pauls	1985	65.0	NA	(0.1)	1.91	101.2	NA
Trucking	1984	58.5	NA	0.36	1.68	99.4	NA
Pennsylvania	1985	75.3	NA	2.08	NA	96.3	NA
Truck Lines	1984	67.4	NA	15.33	NA	98.3	NA
Pilot	1985	180.6	(12.4)	(13.9)	1.15	106.9	-0-
Freight Carriers	1984	208.4	(10.0)	(11.9)	1.83	104.8	-0-
Pre-Fab	1985	60.3	0.9	0.70	0.86	98.5	8.63
Transit	1984	56.9	2.6	1.56	0.89	95.4	27.57
Preston	1985	280.5	4.6	3.49	2.20	98.3	3.61
Trucking	1984	285.1	11.1	8.15	2.70	96.1	8.89
Red Star	1985	96.6	11.1	10.56	0.54	88.5	39.44
Express	1984	97.6	9.5	4.38	0.61	90.3	20.67
Roadway	1985	1428.7	128.3	92.30	5.57	91.0	15.22
Express	1984	1400.9	133.8	98.28	5.84	90.4	17.93
Saia	1985	57.0	6.7	7.26	0.62	88.3	39.36
Motor Freight	1984	56.3	8.1	5.66	0.67	85.7	21.88
St. Johnsbury	1965	227.8	17.1	8.17	1.49	92.5	21.74
Trucking	1984	232.3	13.9	7.18	2.02	94.0	20.36
Signal Delivery	1985	206.9	NA	8.20	3.12	93.0	NA
Service	1984	221.7	NA	9.33	2.94	94.3	NA
Smith's	1985	354.9	(8.8)	(7.97)	2.09	102.5	-0-
Transfer	1984	335.1	5.5	(3.26)	2.10	98.4	-0-
Southeastern	1985	77.1	8.1	7.50	0.85	89.5	55.76
Freight Lines	1984	70.0	10.1	9.64	0.83	85.6	111.50
Southwest	1985	64.2	3.6	0.11	0.57	94.4	4.91
Motor Freight	1984	59.8	2.2	0.52	0.58	96.3	1.82
Stoops	1985	57.0	3.4	0.06	0.64	94.0	3.54
Express	1984	44.4	4.0	1.65	0.48	90.9	88.41
Thurston	1985	136.5	(1.7)	(2.83)	1.27	101.3	-0-
Motor Lines	1984	111.5	2.1	(1.20)	1.29	98.1	-0-
Transcon	1985	323.5	9.3	0.64	1.73	97.1	1.60
Lines	1984	326.5	19.6	8.73	1.83	94.0	28.10
Transus	1985	90.2	1.3	1.57	0.75	98.5	13.39
Inc.	1984	96.1	4.7	3.70	0.88	95.1	29.10
Tri-State	1985	114.5	(0.4)	(1.21)	0.94	100.4	-0-
Motor Transit	1984	109.6	1.1	0.51	0.93	99.0	2.48
United	1985	367.9	3.0	3.04	0.67	99.2	8.63
Van Lines	1984	341.3	(0.3)	2.89	0.60	100.1	4.79
Viking	1985	130.3	7.2	3.15	0.67	94.5	8.61
Freight System	1984	102.9	6.7	3.57	0.58	93.5	10.83
Watkins	1985	119.2	7.5	3.73	0.45	93.7	27.73
Motor Lines	1984	116.6	4.9	2.28	0.49	95.8	19.61
Werner	1985	73.7	NA	5.68	NA	83.0	NA
Enterprises	1984	53.5	NA	4.45	NA	84.9	NA
Yellow	1985	1407.1	97.3	56.00	5.09	93.1	20.90
Freight System	1984	1293.3	68.8	41.24	4.95	94.7	18.07

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[1] The carriers listed are those with the 100 largest gross revenues for 1985, as determined by Commercial Carrier Journal in its "Top 100" report, July 1986. Data for United Parcel Service of Illinois and United Parcel Service of New York, ranked one and two in the CCJ list, are not included in this listing, because their operations are generally dissimilar from the other motor carriers listed. Categories and data shown were obtained from the CCJ report and from the Interstate Commerce Commission's year-end report. Some figures have been rounded off to meet space requirements.

[2] Net Carrier Operating Income – Difference between carrier operating revenues and carrier operating expenses. As reported by the Interstate Commerce Commission.

[3] In most instances, revenue tons hauled reflect common and contract carrier service.

[4] Net Income – After taxes, as reported by Commercial Carrier Journal.

[5] Operating Ratio – Ratio of operating expenses to operating revenues.

[6] Return on Equity – Ratio of net income before net extraordinary charges for write-down of operating rights to shareholders' equity less intangible property at end of previous calendar year. The symbol -0- indicates a deficit in net income and/or shareholders' equity. As reported by the Interstate Commerce Commission.

[7] Now part of Ryder Freight System.

[8] Formerly Ryder/P-I-E Nationwide.

This, along with some fancy accounting footwork, explains the lower revenue and net income figures on the "total" line of this year's ICC tabulation.

Total miles of railroad track has declined 2.4 percent annually since 1974, and freight cars in service has declined 3.7 percent annually. It is also important to note a relatively steep decline in employment, which fell 9.6 percent annually from 1981 through 1984.

The result of this shrinkage and strict control of costs is that the railroads have been transformed from cash users to cash generators. From 1975 to 1980, the railroads' cash flow ratio was in the 0.5 to 0.7 range. In other words, there was only $5 to $7 of cash generated for every $10 of capital expenditures required. In 1981, however, the ratio turned strongly positive and, as a result, the industry's debt-to-capital ratio has come down from 0.41 to 0.28.

With railroad operations shrinking and balance sheets and cash flow in good shape, railroads have become aggressive acquirers. Initially, acquisitions centered on energy concerns, but transportation purchases have been more prevalent recently. We've seen buyouts of a steamship company, a barge line, a motor carrier van line and other small truckload carriers. Considering the large growth in piggyback traffic, it may be tempting for a railroad to buy a large LTL motor carrier—something that has been anticipated for a number of years.

continued on page 48

CLASS I FREIGHT RAILROADS – SELECTED EARNINGS DATA

CARRIER & YEAR		OPERATING REVENUES ($ millions)	NET CARRIER OPERATING INCOME[1] ($ millions)	INCOME BEFORE EXTRAORDINARY ITEMS[2] ($ millions)	NET INCOME[3] ($ millions)	REVENUE TONS MILES[4] (100 millions)	RETURN ON NET INVESTMENT[5] (%)
Atchison, Topeka	1985	2,144.4	119.7	125.8	125.8	69.09	3.42
& Santa Fe	1984	2,305.4	148.8	135.0	135.0	75.09	4.50
Baltimore	1985	1,022.3	(17.8)	(53.1)	(53.1)	21.45	-0-
& Ohio[5]	1984	1,050.9	69.8	43.7	43.7	26.50	4.22
Boston	1985	115.7	1.5	4.3	4.3	2.30	2.09
& Maine[6]	1984	125.0	6.4	7.9	7.9	2.63	9.43
Burlington	1985	4,040.5	458.3	488.5	488.5	184.09	7.72
Northern	1984	4,440.2	547.1	551.3	551.3	200.58	9.94
Chesapeake	1985	1,020.9	(1.0)	(59.0)	(59.0)	32.21	-0-
& Ohio[5]	1984	1,050.5	79.5	142.3	142.3	32.68	5.27
Chicago, Mil.,	1985	49.0	(8.3)	(9.1)	(9.1)	–	-0-
St. Paul & Pac.[8]	1984	417.1	2.8	(40.5)	(25.8)	12.51	0.44
Chicago &	1985	823.7	4.4	(29.5)	(26.1)	24.28	0.42
North Western[5, 7]	1984	822.1	59.2	20.9	20.9	24.63	5.70
Consolidated	1985	3,153.7	309.1	360.9	441.8	74.13	6.23
Rail Corp.	1984	3,321.6	442.2	472.3	500.2	76.82	8.94
Delaware	1985	109.6	(3.1)	(3.5)	(3.5)	3.65	-0-
& Hudson	1984	123.2	(4.9)	(6.5)	(6.5)	4.03	-0-
Denver & Rio	1985	325.5	23.5	24.1	24.1	11.64	4.02
Grand Western	1984	358.4	25.4	23.1	23.1	13.06	4.78
Elgin, Joliet	1985	85.0	0.4	5.1	5.1	0.48	-0-
& Eastern	1984	90.2	1.8	7.4	7.4	0.50	1.20
Florida	1985	117.8	9.3	23.6	23.6	3.23	3.49
East Coast	1984	121.5	13.8	26.9	26.9	3.15	4.81
Grand Trunk	1985	342.9	5.3	1.4	5.1	4.98	1.59
Western	1984	341.1	14.4	7.5	7.5	5.58	3.67
Illinois	1985	880.5	33.3	25.7	30.0	25.75	1.89
Central Gulf	1984	954.7	53.8	62.4	62.4	27.01	3.08
Kansas City	1985	316.7	31.4	23.8	23.8	11.62	6.82
Southern	1984	331.5	35.8	28.6	28.6	12.07	7.58
Missouri-Kansas-	1985	263.1	7.3	(5.6)	(5.6)	8.92	2.21
Texas	1984	275.6	18.4	7.9	7.9	8.39	6.15
Missouri	1985	1,656.0	141.7	71.0	71.0	51.37	4.76
Pacific	1984	1,795.2	148.0	130.0	130.0	52.84	5.35
Norfolk	1985	1,720.9	170.4	281.3	281.3	44.17	6.10
& Western	1984	1,716.2	161.5	264.0	264.0	44.00	6.08
St. Louis	1985	390.1	17.3	21.2	21.2	13.47	2.21
Southwestern	1984	436.2	25.3	44.6	44.6	15.39	3.36
Seaboard	1985	2,645.0	47.6	(14.6)	(14.6)	76.56	1.18
System[5]	1984	2,785.8	268.3	246.3	246.3	80.40	7.16
Soo	1985	600.4	13.1	(2.0)	(2.0)	18.34	2.82
Line[8]	1984	315.5	12.4	18.0	18.0	9.96	2.71
Southern	1985	2,053.9	18.3	117.0	117.0	63.50	0.58
Pacific	1984	2,188.6	66.7	137.2	137.2	68.75	2.22
Southern	1985	1,704.3	210.2	207.7	207.7	47.39	6.09
Railway[9]	1984	1,795.4	228.4	221.1	221.1	48.88	6.73
Union	1985	1,896.9	157.6	187.1	187.1	73.40	4.94
Pacific	1984	1,920.9	134.1	122.7	122.7	66.62	4.21
Western	1985	156.8	(6.4)	(12.7)	(12.7)	6.07	-0-
Pacific	1984	146.7	0.3	(6.8)	(6.8)	5.44	0.20

Note: Data shown above are based on ratable depreciation accounting (DA) for track structures. By Interstate Commerce Commission order served February 17, 1983 ("Alternative Methods of Accounting for Railroad Track Structures"), railroads were required to file financial data with the ICC on the basis of DA. DA replaced the retirement-replacement-betterment accounting method for track structures.

[1] Net Railway Operating Income – Difference between operating revenues and the total of railway operating expenses, railway tax accruals and net equipment and joint facility rents.

[2] Income Before Extraordinary Items – Net income after including fixed charges, non-operating income, unusual or infrequent items and earnings attributable to discontinued segments but before extraordinary items and cumulative effect of changes in accounting principles.

[3] Net Income – Net income after extraordinary items and cumulative effect of changes in accounting principles.

[4] Return on Net Investment – Ratio of railway operating income to net investment in railway property used in transportation services at end of previous calendar year. The latter includes an allowance for working capital based on the ICC's Rail Form A formula. If net investment data as of the end of each quarter were available, returns on investment would be computed using an average of the net investment at the beginning and at the end of the respective twelve-month periods. However, net investment data is generally only available at the end of the calendar year; a substantial portion of this data is derived from annual reports (Form R-1) of Class I line-haul railroads which are required to be filed with the Commission by March 31 of the following year. Thus, the net investment data used for this report which represent the latest available end-of-calendar-year data are not averaged in order to assure that net railway operating income is more closely equated with the railroad assets generating this income. The symbol -0- for return on net investment indicates a deficit net railway operating income. In Ex Parte No. 458, "Railroad Cost of Capital-1984," served January 6, 1986, the Commission found that the railroad industry's current cost of capital, or fair return rate, for comparison with returns on net investment was 15.8 percent for 1984.

[5] Net railway operating income, income before extraordinary items and net income shown for the CSX Corporation railroads were substantially reduced due to large year-end accounting adjustments to record severance pay for employee buyouts and the write-down of assets attributable to freight car retirements and line abandonments. These large adjustments and the large adjustment by the Chicago and North Western (see footnote 7) also had a significant impact on the composite earnings data for all Class I railroads reflected on the "total" line.

[6] Boston and Maine's large return on net investment is attributable to a substantial write-down of the railroad's net investment in railroad property on June 30, 1983. The purchase price for the common stock of Boston and Maine was considerably less than the railroad's net equity, necessitating a large write down of railroad assets.

[7] Net railway operating income, income before extraordinary items and net income shown for Chicago and North Western Transportation Company and lessor subsidiaries were reduced by a $24.6 million year-end accounting adjustment to record a provision for employee severance pay.

[8] The Soo Line Railroad Company acquired the railroad operations of the Chicago, Milwaukee, St. Paul and Pacific Railroad (Milwaukee) on February 19, 1985. Data shown for Soo Line reflect operations over the lines of the Milwaukee subsequent to February 19. Data shown for Milwaukee reflect operations from January 1 to February 19. Data filed by Milwaukee for 1984 included a $47.8 million loss from disposal of discontinued segments (the lines sold to Soo Line), of which $15 million represented an estimated loss for the period of January 1 to February 19, 1985. Since the actual loss incurred in the 1985 period was subsequently reported by Milwaukee and is shown above in the data for 1985, the estimated $15 million loss has been eliminated from Milwaukee's data in compiling the data shown for 1984.

[9] Data for three Class I subsidiaries of the Southern Railway (Alabama Great Southern Railroad, Central of Georgia Railroad and Cincinnati, New Orleans and Texas Pacific Railway) are included in the data shown for Southern Railway.

CARRIER FINANCE

AIR FREIGHT

Express is the largest segment of the air freight industry. While this segment is growing rapidly, in excess of 20 percent annually, it is one of the least healthy. Airborne, Emery, Federal Express and Purolator all have significant, although not dangerous, levels of debt. More important, profitability has dropped noticeably. No doubt, the air express shipper is receiving excellent service at increasingly lower prices. The industry, however, is not receiving an adequate return on its *very* large investments. This cannot last forever. There needs to be some consolidation to get fewer companies chasing the volume, and to bring in higher returns.

At the opposite end of the spectrum are the "pure" air freight forwarders. Contrary to the accepted laws of economics, the forwarders make minimal capital investments while earning returns often envied by heavily-invested airplane owners. While the railroads are becoming multimodal asset owners, the forwarders concentrate on adding value to the assets of others. Consequently, the forwarders are able to become an extension of the traffic department in developing distribution strategies.

Among combination air carriers, every airline is looking to establish a desirable passenger "hub," and this trend has a direct affect on their ability to provide competitive point-to-point freight service.

OCEAN CARRIERS

As the steamship industry struggles to keep its head above water, two trends have emerged that should benefit the shipper. First, several lines have introduced worldwide "supership" service – huge capacity ships that dramatically lower cost-per-unit while sacrificing transit times. Second, several carriers have developed intermodal networks that offer faster transit times – via double-stack trains, for example – at a higher price.

Still, the challenge continues to find ways to reduce ocean carriers' heavy debt loads (see table). The recently announced appeal to creditors by McLean Industries, parent of United States Lines, for 60 days to shape a debt restructuring plan, is just the latest symptom of this chronic ocean malady.

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AIR COURIERS

CARRIERS	Debt-to-Equity Ratio 1980	Debt-to-Equity Ratio 1985	Net Profit Margin 1980	Net Profit Margin 1985
Airborne	0.47	0.68	2.8	1.7
Emery	0.09	0.60	3.9	2.0
Federal Express	0.79	0.75	9.3	3.8
Purolator	0.51	0.65	2.4	loss

AIR EXPRESS REVENUES – 1985 (millions)

Federal Express	$2,575.0
United Parcel	700.0
U.S. Post Office	600.0
Purolator	440.0
Airborne	325.0
Emery	193.2
DHL	150.0

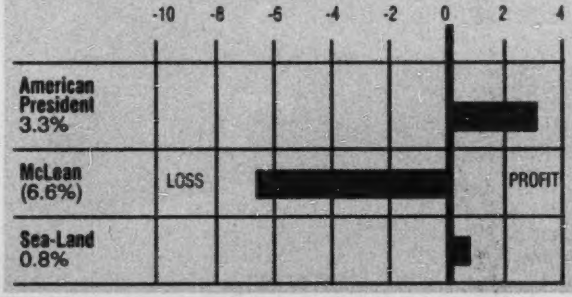
Source: Legg Mason Estimates

TOP 15 AIRLINES – 1985

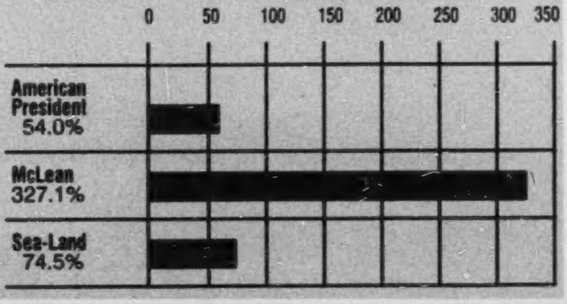
CARRIERS	Total Revenues (millions)	Market Share (%)
American	$5,859.3	13.1
United	4,920.1	12.4
Eastern	4,815.1	9.9
Trans World	3,860.7	9.5
Delta	4,738.2	9.0
Pan American	3,157.0	8.1
Northwest	2,650.0	6.7
Continental	1,731.1	4.9
People Express	927.9	3.3
Republic	1,734.4	3.2
Western	1,306.5	3.1
USAir	1,749.1	2.9
Piedmont	1,366.6	2.4
Southwest	606.1	1.6
Frontier	557.8	1.3

Source: Air Transport Association

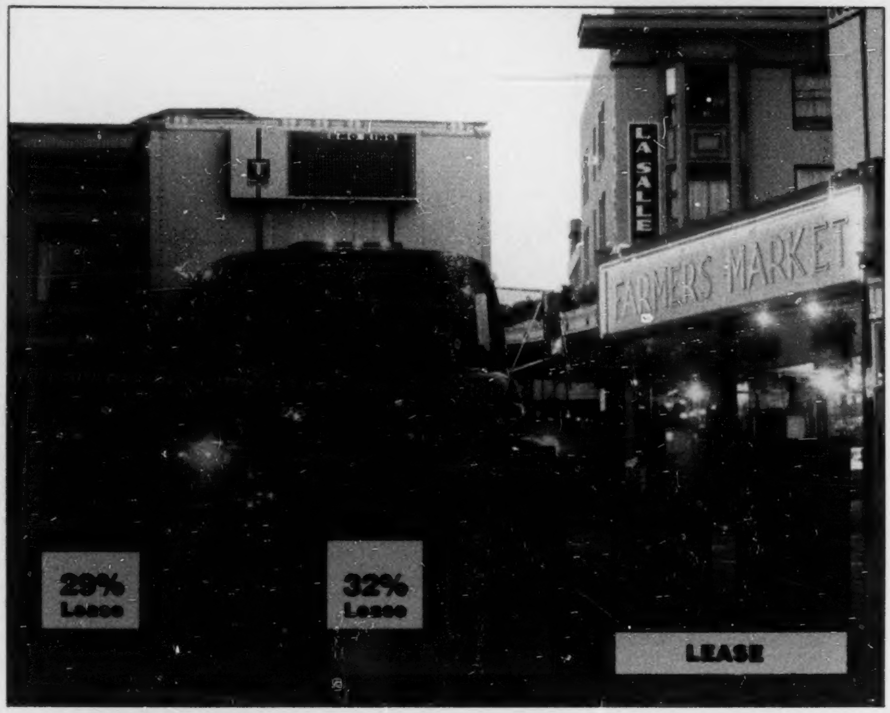
SELECTED 1985 OCEAN CARRIER NET PROFIT MARGINS (%)



SELECTED 1985 OCEAN CARRIER DEBT-TO-EQUITY RATIOS (%)



LAST PICKUP



FOOD FOR THOUGHT

Sister publication *Food Engineering* recently polled 3,000 distribution managers within the food industry to determine how they handle their transportation needs. The chart at left indicates that nearly all respondents ship their products using some combination of contract carriage, leasing and fleet ownership. For example, of those who use contract carriage, 29 percent also lease and 39 percent own part of their fleet. The food industry could be a real growth market for the leasing business – 51.6 percent of the respondents said they do not lease at all. Of those who do, 23 percent use leasing for less than 10 percent of their total transportation needs. The survey also found that 44 percent of the respondents don't use railroads at all, while another 20 percent ship less than 10 percent of their foodstuffs via the rails.

LIFE IN THE FAST LANE

Becky Roloff, who was profiled in May's feature "Found: Tomorrow's Logistics Pro" (p. 24) in her capacity as director of distribution for Pillsbury, apparently is on a fast track. In early May, Roloff was asked to take over as Pillsbury's vice president of marketing. That's a departmental jump rarely made by someone in logistics.

She considers the switch a "lateral move," but notes that it sends out strong signals about her interest in general management. As pointed out in Part One of our Logistics Pro feature (April, p. 28), lateral moves within a company are often the best way for a logistics person to climb the corporate ladder. Roloff jokes that "everything I learned in distribution has nothing to do with what I'm doing now," and that she's been "slammed into the bottom of the learning curve."

Asked to compare distribution and marketing and note any transferable skills, Roloff maintains that what carries over is the ability to form and focus a team effort. Always necessary, she asserts, are planning skills, leadership and organizational abilities. The differences? "There are different numbers to control. In distribution you are mostly concerned with cost. In marketing you have to change your perspective to profit. Also, where I was a supplier of service before, now I'm a customer. And because of my distribution experience, I really know what it takes to please a customer."

For those making a similar jump, Roloff offers these words of advice. "The job is bigger than I am right now. But that's the only way you grow. You have to have no fear of failure. The bases are loaded and you have to hit a home run – *this time.* What you did in your last job doesn't matter. It would have been more comfortable to stay in distribution, but now I'm ready to feel terrified. . .and I plan to have as much fun as I can."

VOICE OF PROPHECY

The ink was barely dry on the pages of our June story on regional trucking ("Regional Trucking Checks In," p. 28) when St. Johnsbury Trucking Co. President Bill Clifford became a prophet. "You'll never see St. Johnsbury promote the fact that we're owned by Sun Carriers," Clifford said. "They feel, and we feel, that we have our own strength as a regional carrier. . . ." Clifford and St. Johnsbury will now have the chance to put those words to the test – Sun Carriers announced recently that St. Johnsbury and two of its other regional carriers, Milne and Jones trucking companies, will be spun off in a public stock offering later this year.

MORE CAREER FOLLOW-UP

The Council of Logistics Management recently issued the second edition of its 20-page booklet titled "Careers in Logistics." The booklet is a handy source for high school and early college students who are exploring career choices. Free single and bulk copies are available by writing to CLM at 2803 Butterfield Road, Oak Brook, IL 60521.

HOME OF THE BRAVES?

Pilot Air Freight has lent its support to efforts aimed at luring a major league baseball franchise to Buffalo. Pilot President John Edwards put up $1 million toward construction of a new stadium, to be called Pilot Field. While Buffalo pursues a big league franchise, the Buffalo Bisons – a Triple-A affiliate of the Chicago White Sox – will put the stadium to good use.

PHOTO/ART CREDITS

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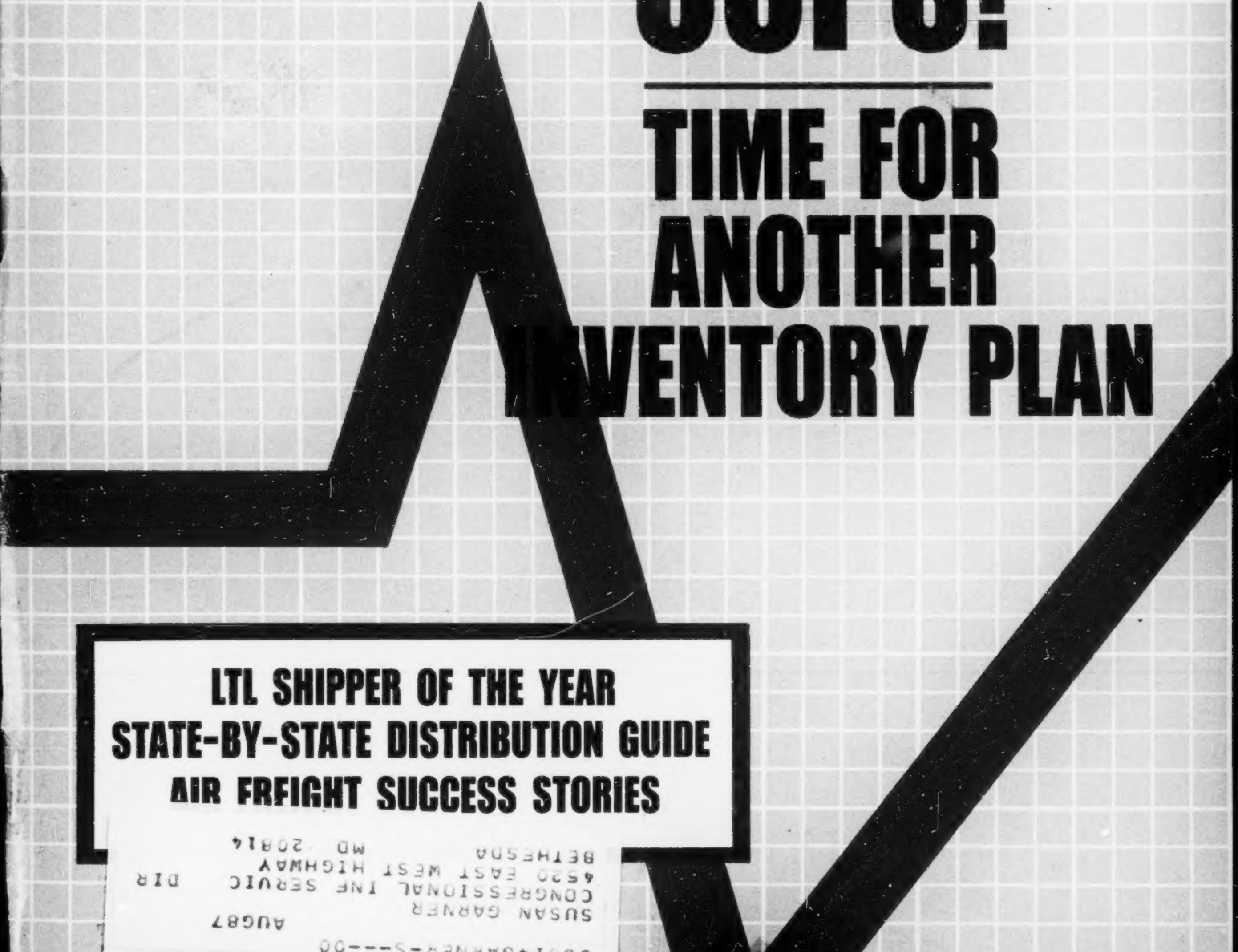
Special Section
WAREHOUSING REVIEW



OOPS!

TIME FOR ANOTHER INVENTORY PLAN

LTL SHIPPER OF THE YEAR
STATE-BY-STATE DISTRIBUTION GUIDE
AIR FREIGHT SUCCESS STORIES

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CHILTON'S

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SEPTEMBER 1986

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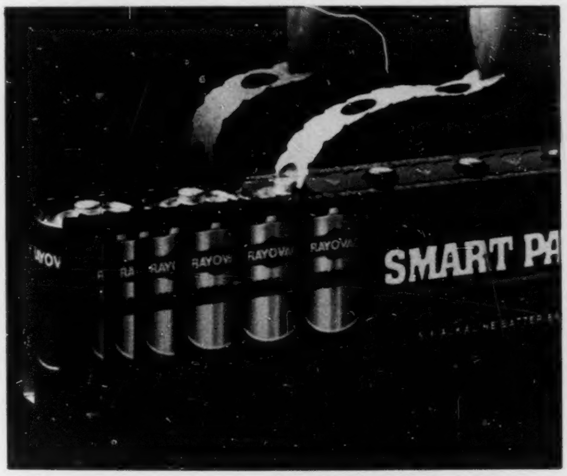
32 CASEBOOK: AIR FREIGHT SERVICES
These days, shipping via the airways can mean a lot of different things. A lot of the time, what happens on the ground is just as important as what goes on in the clouds.

40 IT'S THE LEASE YOU CAN DO
Whether it's rail cars, trucks, trailers, computers, or people, here's a guide to some companies that will let you pay as you go.

46 POWER SELLS
Business is booming for battery maker Rayovac, and the distribution department is leading the charge to better margins. That's why the Wisconsin company is the 1986 DISTRIBUTION/NASSTRAC LTL Shipper of the Year.



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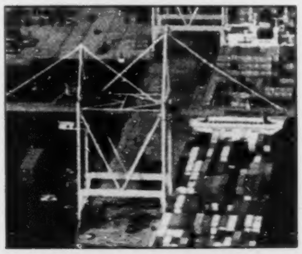
Lining up the load centers



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DIALOGUE

A QUICK INVENTORY

Seasonal demand surges, new product introductions, inaccurate forecasts, redirected marketing efforts. All of these translate into inventory fluctuations. Some are predictable, many aren't. How does your company prepare for its inventory swings? That's what our June Dialogue card asked. Here are some of the key steps our readers have taken to bring order to the process. Also, you can find out how others handle inventory problems in this month's cover story, "Oops—Time For Another Inventory Plan," (page 10).

"We utilize air freight to offset delays in JIT. JIT seems to be always 'just one day late.' "—**Paul Weber, nat'l physical dist. mgr., Agfa Gevaert, Inc., Teterboro, NJ**

"We require suppliers to maintain an average truckload of material in 'easy access.' On call, we can have merchandise in the warehouse, ready to deliver in 24 hours from 1,200 miles away. Quick reflexes is the answer."—**Joe Vann, dist. mgr., Kesha Distribution, Arlington, TX**

"To prepare for upswings, eight to 12 weeks advance notice is required to assure product completion on schedule."—**Jeff Jones, materials mgr., JTW Drills & End Mills, Pine Bluff, AZ**

"Inventory levels are adjusted weekly using sales projections, current trends and historical movement."—**William M. Hazen, director, distribution and traffic, Taylor Food Products, Compton, CA**

continued

The greatest inventory challenge for my operation is:	
new product introductions	33%
seasonality	30%
non-seasonal demand fluctuations	22%
new marketing strategies	15%
Inventory aberrations create the greatest challenge in:	
outbound freight management	39%
work-in-process	32%
inbound management	29%
JIT has made coping with demand swings harder	65%
JIT has made coping with demand swings easier	35%
Have had to put a recall or discontinuation contingency plan into action in the past two years	39%

QUESTION OF THE MONTH

BUDGET BATTLES

Whether your company's on a fiscal or calendar year accounting set-up, by now you've certainly gone through another budget war. How did the transportation/distribution department fare in 1987? Will your department have more money to spend and people to work with next year? Or will you have less? Maybe your company is holding the line—maintaining the status quo?

General economic signs remain fairly healthy, but does that mean that these are relatively relaxed times for departmental purse strings? Or does the pressure continue to mount to maximize your return—or minimize your drain? Are you being asked to do more with less?

If and when you are asked to cut your proposed budget, what are the lines you have the hardest time protecting? In your management's view, what are accepted as essential expenditures? What kinds of things are viewed as excessive or luxuries?

Give us your answers to these and other questions about your company's budget policies on the card below.

DIALOGUE

September 1986

- My department's 1987 budget will be ______larger/______smaller/______the same as '86's by ______percent (if larger or smaller).
- My department's 1987 head count will be ______larger/______smaller/______the same as '86's.
- The transportation/distribution budget line that was reduced most for '87 was (check ONE only): ______freight bill; ______equipment (leased or purchased); ______salaries; ______computer processing expenses; ______administrative; ______other: ____________________
- The transportation/distribution budget line that was increased most for '87 was (check ONE only): ______freight bill; ______equipment (leased or purchased); ______salaries; ______computer processing expenses; ______administrative; ______other: ____________________
- As now budgeted for '87, transportation/distribution expenses amount to ______ percent of corporate revenues.
- Where did you get your '87 budget figures from? ______A percentage over last year; ______industry averages; ______proportionate to sales forecasts; other: ____________________

7

Here's the response I got from top management after preparing and presenting the 1987 budget for my company's transportation and distribution operations:

____

____

____

____

NAME (print) ______________ TITLE ______________

COMPANY ______________ PHONE ______________

ADDRESS ______________

CITY ______________ STATE ______________ ZIP ______________

FIGURES IN SPEECH

(Quotes from transportation and distribution notables that have caught the ears of *DISTRIBUTION* editors:)

"How can we call a market that generates only one percent of total intercity traffic saturated? Our future lies not in seizing a bigger share of a static or shrinking pie, but in finding new customers. Much of American and foreign industry is turning out goods that are right for traffic by air." —**George Ryan, president, Burlington Northern Air Freight.**

•

"Re-evaluate how you purchase air freight services. Price can't be the only criteria, because almost any carrier can meet or beat the price. Picking a vendor on the basis of price alone is like selecting a dinner entree by reading only the cost column. You don't know if your selection is frog's legs, calf's liver or filet mignon on a full course dinner or a la carte. Today, air services are packaged and repackaged in different ways. When you buy a car, you size up the standard equipment, price out the options that interest you and either mix and match or make trade-offs. The same kind of reasoning will serve you well in shopping for a freight company." —**Norman Freeman, president, Associated Air Freight.**

"Outbound orders are ready a minimum of seven days prior to due date, but we end up "storing" many over 30 days. H-O-T works better than J-I-T." —**James Souder, traffic mgr., Worthington Steel Co., Columbus, OH**

"Good communication with customer service, quick shipping performance from warehouses, refined sales plans and central warehouse facilities to absorb swings." —**Kevin Shannon, reg'l distribution mgr., Dow Consumer Products, City of Industry, CA**

"It is imperative that my department is totally involved in setting material schedules and aware of amended production schedules. To insure JIT works, suppliers are constantly communicated with regarding production schedules and sales forecasts. Key 'A' or 'B' long lead time materials are explicitly done on a consignment purchasing basis as to stock levels." —**Lester Sandler, purchasing mgr., Caradco Corp., Rantoul, IL**

"Our inventory turns make customer service the most important factor, as stock is not kept or stored for long periods of time. Our warehouse is not geared for large inventory amounts." —**Paul Kiefer, traffic mgr., Tube Steel Co. of America, New York, NY**

"Maintain outside storage alternatives. We have surplus space due to seasonal markets." —**H. Nicholls, distribution mgr., R.R. Donnelley, Warsaw, IN**

"Expediting and reordering. Develop three and nine months (minimum/maximum) stock levels." —**R. Cassidy, maintenance inventory system coordinator, Chicago Transit Authority, Chicago, IL**

"We use the ASI forecasting system and tie it into our master production schedule at three of our plants." —**Robert Dunn, distribution mgr., Dana Corp., Boston Division, Brentwood, TN**

"Marketing confirmation and planning, product priority adjustment and frequent product volume sampling." —**B. Cybularz, materials mgr., Dayco Corp., Ocala, FL**

"Revise forecasts for the next 60 production days, and then schedule production accordingly." —**Michael Whiteside, planning/distribution mgr., Burmah Castrol, Inc., Hackensack, NJ**

"Marketing communications, decrease or increase supplies of raw materials and adjust production. We have a manufacturing marketing plan as a base line tool." —**David J. York, materials & distribution, Steadley Co., Carthage, MO**

"We revised our short-term forecasting programs and project control reporting." —**W. Strache, plant mgr., Croue Hinds Lighting, Windsor, CT**

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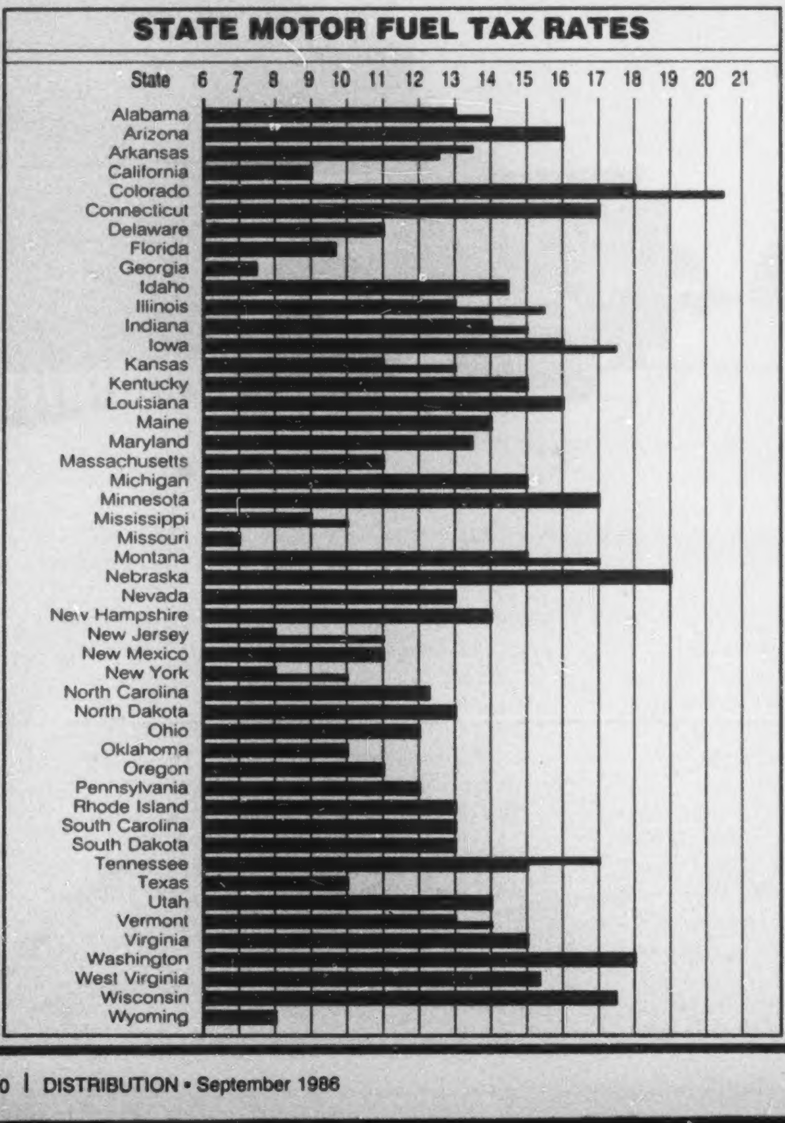
STATE STATISTICS

GUIDE TO DISTRIBUTION & SITE LOCATION DECISIONS

DISTRIBUTION's annual rundown of business environments in the 48 contiguous states



STATE MOTOR FUEL TAX RATES

The information presented in this feature was gleaned from a number of sources. Because it was impossible to convey, in these charts, the full extent of the details provided in these sources, it is recommended that the reader consult these primary sources where appropriate.

One of the most useful tools for evaluating the states is the "General Manufacturing Climates" study. Conducted annually by Grant Thornton accountants and management consultants, it rates the states according to 22 economic factors. Copies are available for $50. Contact Grant Thornton, 1700 Prudential Plaza, Chicago, Ill. 60601.

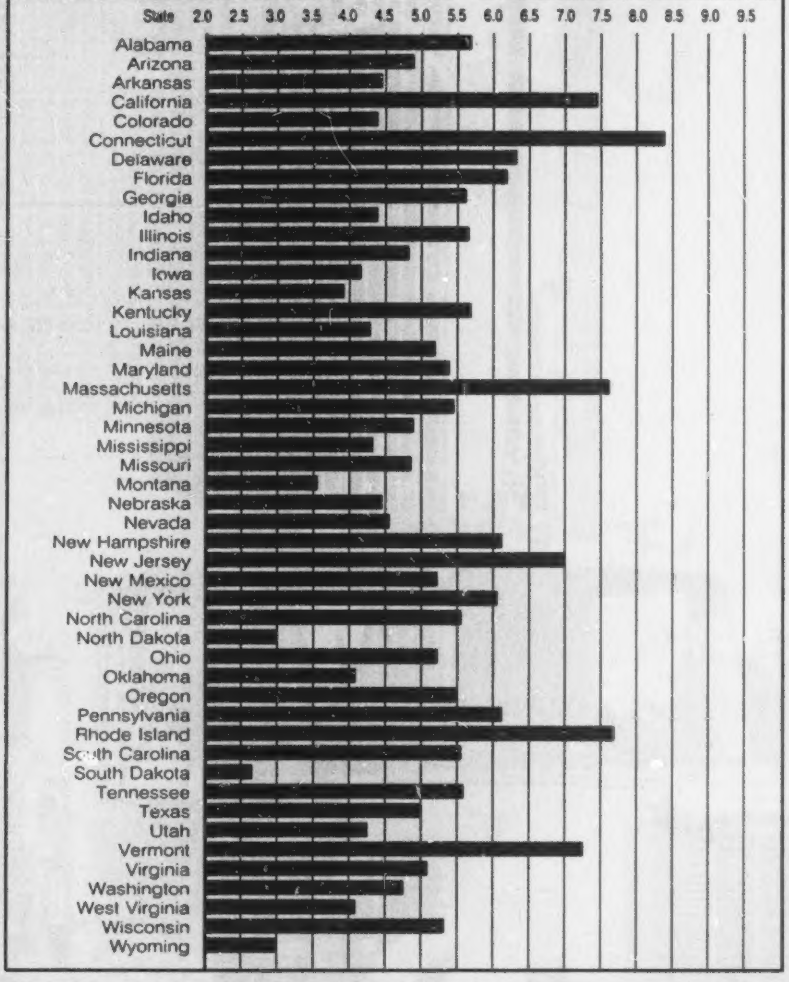
The data on motor fuel taxation was supplied by the Highway Users Federation, 1776 Massachusetts Ave., N.W., Washington, D.C. 20036-1993.

Information on highway regulations, taxes, and reciprocity agreements is also available from the Private Carrier Conference of the American Trucking Associations. Contact the Private Carrier Conference, 2200 Mill Rd., Alexandria, Va. 22314.

FUEL TAX RATES represents the taxes imposed on motor fuels in cents per gallon. The bars are doubled, the upper segment indicating the tax on gasoline, the lower segment the tax on diesel fuel. In many cases the two fuels are taxed at the same rate. In addition to the basic rates, many states also impose additional mileage taxes, surcharges, etc. At the time this data was compiled, motor fuel tax increases were being considered in Illinois, Louisiana, New Jersey and South Carolina. Source: Highway Users Federation.

STATE STATISTICS

ENERGY COSTS PER MILLION BTUs



ENERGY COSTS indicates the cost, in dollars, of fuel and electric energy. Figures are not available for years after 1981. The figures thus represent approximations based on 1982 data. Businesses in the new England states have paid the most for energy. The region was the only one which paid more than the national average cost for fuel. (The average cost within New England was calculated at $7.10. The national average was $6.51.) Further, five of the six states in the New England area (Connecticut, Massachussets, New Hampshire, Rhode Island, and Vermont) ranked among the ten most fuel-expensive states. In contrast, the North Central area posted seven of the ten cheapest rates in the nation (Iowa, Kansas, Montana, Nebraska, N. Dakota, S. Dakota, Nebraska). Source: General Manufacturing Climates, Grant Thornton.

50 LEADING MANUFACTURING MARKETS

Metro area	1985 Shipments	% of US Total	Total Plants	Metro area	1985 Shipments	% of US Total	Total Plants
Los Angeles area	$74,924	3.66	4,566	Louisville	$14,092	0.69	520
Chicago	71,730	3.50	5,976	Kansas City	13,950	0.68	938
Detroit	60,304	2.94	3,637	Greensboro area	13,629	0.67	763
Philadelphia	53,255	2.60	3,212	Rochester, NY	12,617	0.62	503
New York	44,861	2.19	5,544	New Orleans	12,435	0.61	386
Boston area	38,998	1.90	2,939	Columbus	12,291	0.60	641
Houston	35,208	1.72	1,446	Bridgeport, CT area	12,184	0.59	948
San Jose	29,506	1.44	819	Richmond area	12,039	0.59	411
Newark	24,693	1.21	1,912	Providence, RI area	11,568	0.56	1,558
Minneapolis,St. Paul	24,388	1.19	1,598	Toledo	11,365	0.55	444
Cincinnati	21,067	1.03	972	Indianapolis	11,254	0.55	649
Cleveland	20,886	1.02	1,962	Hartford, CT area	11,168	0.55	1,080
St. Louis	20,843	1.02	1,499	Baton Rouge	11,004	0.54	171
Beaumont area	19,760	0.96	119	Flint, MI	10,932	0.53	124
Dallas	17,987	0.88	1,317	Allentown, PA area	10,813	0.53	581
Nassau-Suffolk	17,902	0.87	1,838	Phoenix	10,791	0.53	675
Milwaukee	17,805	0.87	1,243	Charlotte area	10,644	0.52	892
Oakland	17,277	0.84	749	Denver	10,293	0.50	771
Bergen, NJ area	16,944	0.83	1,767	Portland, OR	9,823	0.48	729
Middlesex, NJ area	16,032	0.78	809	Lake Charles, LA	9,653	0.47	50
Seattle	15,752	0.77	814	Ft. Worth area	9,327	0.46	652
Pittsburgh	15,662	0.76	1,004	Greenville area	8,733	0.43	572
Anaheim area	14,954	0.73	853	Salt Lake City area	8,646	0.42	494
Atlanta	14,509	0.71	1,054	Washington, DC	8,564	0.42	729
Baltimore	14,464	0.71	958	Lansing, MI area	8,471	0.41	166

WHERE TO DRAW THE LINE

Several charts in this feature summarize information gathered by Grant Thornton in its "General Manufacturing Climate" survey. For the purposes of the study, the 48 contiguous states were grouped into eight regions as follows:

Southwest – Arizona, Colorado, Nevada, New Mexico and Utah;

Southeast – Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Virginia;

North Central – Idaho, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota and Wyoming;

South Central – Arkansas, Louisiana, Oklahoma and Texas;

New England – Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont;

MidEast – Delaware, Maryland, New Jersey, New York, Pennsylvania, West Virginia;

West – California, Oregon and Washington, and;

Great Lakes Region – Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin.

LEADING MARKETS – "Shipments" indicates the production of manufacturers employing 20 or more workers. "% of U.S. Total" indicates the metro area's share of the total U.S. manufacturing production, by number of shipments. "Total Plants" is the number of manufacturing facilities in the area which employ 20 or more workers. Source: 1986 Survey of Industrial & Commercial Buying Power, and Sales & Marketing Management.

STATE STATISTICS

MOTOR VEHICLE SIZE, WEIGHT AND ACCESS RESTRICTIONS

	height			width		length										weight				access						
						straight truck					tractor/trailer															
	13'6"	14'	14'6"	96"	102"	35'	40'	45'	60'	see notes	60'	65'	70'	see notes	not specified	73,000 – 79,999 lbs	80,000 lbs	over 80,000	see notes	.5 miles	1 mile	3 miles	5 miles	10 miles	unlimited	see notes
Alabama	•			•			•				•						•				•					
Arizona	•			•			•								•		•								•	
Arkansas	•				•		•				•						•								•	
California					•		•					•					•			•						
Colorado	•				•		•						•				•								•	
Connecticut	•				•				•						•		•				•					
Delaware	•			•			•				•						•									a
Florida	•				•	•									•		•									b
Georgia	•				•				•		•						•				•					
Idaho		•			•		•								•		•								•	
Illinois	•				•					a				e		•							•			
Indiana	•				•					b					•		•								•	
Iowa	•			•			•				•						•									
Kansas	•				•					c					•			•							•	
Kentucky	•				•										•		•						•			
Louisiana	•			•			•								•			•				•				
Maine	•				•			•			•						•									c
Maryland	•			•			•								•	•										d
Massachusetts	•				•	•					•						•									e
Michigan	•			•			•							f		•							•			
Minnesota	•				•		•					•				•										f
Mississippi	•				•		•								•		•								•	
Missouri				•			•				•						•							•		
Montana	•				•		•								•		•									g
Nebraska			•		•		•					•													•	
Nevada		•			•		•						•						j						•	
New Hampshire	•				•	•									•		•									h
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New Mexico	•				•		•					•						•								j
New York	•			•		•					•						•									k
North Carolina	•			•		•					•					•						•				
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Oklahoma	•				•												•									l
Oregon		•			•		•				•						•									m
Pennsylvania	•			•			•				•						•									n
Rhode Island	•				•		•				•						•									o
South Carolina	•			•		•					•						•									p
South Dakota	•				•			•							•			•							•	
Tennessee	•			•			•								•		•								•	
Texas	•				•			•							•		•								•	
Utah		•			•			•							•		•								•	
Vermont	•				•				•		•						•									q
Virginia	•			•			•				•									•						
Washington		•			•		•																		•	
West Virginia	•			•			•				•						•									r
Wisconsin	•				•		•				•						•					•				
Wyoming		•			•									i				•						•		

MOTOR VEHICLE RESTRICTIONS outlines the size and width limitations observed by the various states. The limits described are those imposed on vehicles travelling on state and non-designated highways. Limits governing vehicles travelling on the insterstate system are governed by the provisions of the Surface Transportation Assistance Act. Also included in the chart are the restrictions limiting access to the designated interstate highway system. The limitations listed under the "length" heading are those for a two-axle straight truck, and for 3-axle tractor, 2-axle trailer combinations. The limits listed are those in general application. Several exceptions or additional restrictions may be applied in some cases.

Notes, vehicle sizes and weights:

a – maximum length = 42 ft.
b – maximum lentgh = 36 ft.
c – maximum length = 42 ft., 6 in.
d – maximum length = 50 ft.
e – maximum 55 ft. wheelbase
f – maximum length = 60 ft., with maximum semi-trailer length of 48 ft.
g – maximum length = 75 ft.
h – maximum length = 53 ft.
i – maximum length = 85 ft.
j – maximum weight = 72,500 lbs.

Notes, interstate system access provisions:

a – By permit only
b – Rural interchanges 1 mi. (2 lane) and 3 mi. (4 lane); urban interchanges 1 mi on crossroads with 12-ft. lanes. Other access by petition
c – Rural interchanges 2 mi., urban interchanges .5 mi.
d – Shortest practical route
e – By permit only
f – Determine on case-by-case basis
g – No policy
h – By permit only for twins
i – By permit only for twins
j – 20 mi.
k – Permit required beyond 1,500 ft.
l – "very reasonable" access
m – All but local roads, twins not restricted
n – .2 mi.
o – Doubles restricted to 1 urban mi., 1 mi. on 2-lane roads, 3 mi. on 4-lane roads in rural areas
p – By permit only
q – Unpermitted twins: .5 mi for access to food, fuel, lodging, terminals
r – 2 mi.

STATE STATISTICS

STATE LABOR ENVIRONMENTS

AVERAGE WAGES

State	Avg. Wage/hr.	% Change	State	Avg. Wage/hr.	% Change
Alabama	$ 7.97	13.69	Nebraska	$ 8.93	11.49
Arizona	9.09	13.34	Nevada	9.12	8.31
Arkansas	7.31	16.77	New Hampshire	7.85	22.46
California	9.77	14.14	New Jersey	9.50	18.45
Colorado	9.24	11.59	New Mexico	7.97	21.87
Connecticut	9.22	20.21	New York	9.22	17.60
Delaware	9.30	12.32	North Carolina	7.01	18.01
Florida	7.62	16.69	North Dakota	7.86	10.39
Georgia	7.58	19.00	Ohio	10.96	15.01
Idaho	9.34	13.49	Oklahoma	9.64	17.56
Illinois	10.08	13.13	Oregon	10.44	10.24
Indiana	10.45	11.53	Pennsylvania	9.28	11.81
Iowa	10.25	6.77	Rhode Island	7.23	18.52
Kansas	9.40	16.77	South Carolina	7.28	17.80
Kentucky	9.28	18.07	South Dakota	7.15	0.42
Louisiana	10.06	17.25	Tennessee	7.93	18.01
Maine	8.05	20.87	Texas	9.04	13.71
Maryland	9.45	12.63	Utah	8.95	15.63
Massachusetts	8.50	21.26	Vermont	8.03	18.26
Michigan	12.18	15.67	Virginia	8.12	18.71
Minnesota	9.75	16.07	Washington	11.61	11.21
Mississippi	6.95	15.64	West Virginia	9.93	12.84
Missouri	9.32	17.97	Wisconsin	10.03	13.38
Montana	10.74	18.15	Wyoming	8.86	12.29

UNIONIZATION

State	Union Workforce	% Change	State	Union Workforce	% Change
Alabama*	18.98%	−5.75	Nebraska*	10.82%	−13.24
Arizona*	4.24	−2.05	Nevada*	7.48	−1.87
Arkansas*	13.60	1.52	New Hampshire	7.53	−6.16
California	24.21	−2.93	New Jersey	20.95	−5.87
Colorado	10.80	−2.05	New Mexico	12.40	−18.96
Connecticut	15.67	−6.54	New York	51.82	3.16
Delaware	22.16	13.20	North Carolina*	5.24	5.05
Florida*	8.63	0.07	North Dakota*	10.97	−19.05
Georgia*	13.41	−5.41	Ohio	43.98	5.52
Idaho*	12.01	−10.79	Oklahoma	17.03	−3.11
Illinois	35.98	−13.02	Oregon	24.29	−3.26
Indiana	42.60	6.40	Pennsylvania	41.11	0.71
Iowa*	28.23	−8.84	Rhode Island	7.65	−29.00
Kansas*	13.14	2.60	South Carolina*	3.80	−1.66
Kentucky	26.52	−1.78	South Dakota*	3.52	−8.59
Louisiana*	23.17	14.52	Tennessee*	15.52	−1.47
Maine	21.54	−0.06	Texas*	16.69	4.06
Maryland	31.64	−3.08	Utah*	5.63	−22.00
Massachusetts	17.74	−6.89	Vermont	8.18	27.57
Michigan	54.93	6.51	Virginia*	12.17	5.38
Minnesota	20.44	−20.55	Washington	32.39	−7.47
Mississippi*	9.18	5.64	West Virginia	37.10	−3.15
Missouri	35.05	−15.71	Wisconsin	29.31	−5.98
Montana	25.35	0.93	Wyoming*	17.86	−7.37

LABOR PRODUCTIVITY

State	Work Stoppages	Value Added/$	State	Work Stoppages	Value Added/$
Alabama	0.015%	$3.60	Nebraska	0.000%	4.46
Arizona	0.049	5.04	Nevada	0.000	4.24
Arkansas	0.141	3.87	New Hampshire	0.000	3.52
California	0.054	4.59	New Jersey	0.036	4.50
Colorado	0.017	4.25	New Mexico	0.000	4.45
Connecticut	0.185	4.22	New York	0.044	4.98
Delaware	0.151	4.61	North Carolina	0.000	4.01
Florida	0.001	4.67	North Dakota	0.000	4.76
Georgia	0.015	4.15	Ohio	0.090	3.73
Idaho	0.054	4.15	Oklahoma	0.028	3.43
Illinois	0.032	4.19	Oregon	0.079	3.31
Indiana	0.045	3.60	Pennsylvania	0.097	3.80
Iowa	0.003	4.65	Rhode Island	1.052	3.58
Kansas	0.044	4.69	South Carolina	0.000	3.42
Kentucky	0.025	4.30	South Dakota	1.070	4.75
Louisiana	0.013	4.66	Tennessee	0.000	4.06
Maine	0.601	3.20	Texas	0.047	4.79
Maryland	0.025	4.07	Utah	0.000	4.51
Massachusetts	0.006	4.47	Vermont	0.000	4.80
Michigan	0.145	3.46	Virginia	0.028	4.07
Minnesota	0.087	4.58	Washington	0.015	3.53
Mississippi	0.000	3.87	West Virginia	0.098	3.45
Missouri	0.070	4.40	Wisconsin	0.014	3.80
Montana	0.210	2.53	Wyoming	0.000	3.01

AVERAGE WAGES represents the average hourly wage paid to manufacturing workers within each state. These amounts indicate the general cost of human resources. The column labelled "% change" indicates the trend in the average manufacturing wage over the last three years. The lowest average wage is paid in the state of Mississippi, the highest in the state of Michigan. Both states' average wages have grown at moderate rates, indicating little likely change in rank in the near future. Regionally, the southeast presents the most favorable wage climate, with an overall average of $7.75/hr. per worker. At the same time, however, wages in the southeast are rising faster than most areas of the country. Source: General Manufacturing Climates, Grant Thornton.

UNIONIZATION indicates the degree to which the available local workforce is unionized. This factor has a potential affect on the future cost of labor and on labor relations. The second column indicates the change in unionization over two years, as a percentage of the total union workforce. Those states marked with an asterisk are those which have enacted right-to-work laws. In most states, union membership has suffered recently. In some cases, the decline has been drastic. In Arizona, for example, unions have lost more than one-fifth of their membership. Nationwide, membership was down 4.89 percent. The only region which showed a substantial gain in unionization is the South Central states, which showed a 4.25 percent increase overall. Source: General Manufacturing Climates, Grant Thornton.

LABOR PRODUCTIVITY represents, in the first column of data, the percentage of working hours lost due to work stoppages. The second set of figures shows the average value added to manufacturing production for each dollar invested in the payroll. These figures indicate the productivity of the workforce in each state. The range in both sets of figures is wide. Several states recorded no work stoppages within the scope of the survey (data was not collected for stoppages involving fewer than 1,000 workers). On the other hand, two states reported over 1 percent of time lost. The value of each added dollar of payroll ranged from over $5 to $2.53, a difference of nearly 100 percent. The higher figure is closer to the national average of $4.11. Source: General Manufacturing Climates, Grant Thornton.

STATE STATISTICS

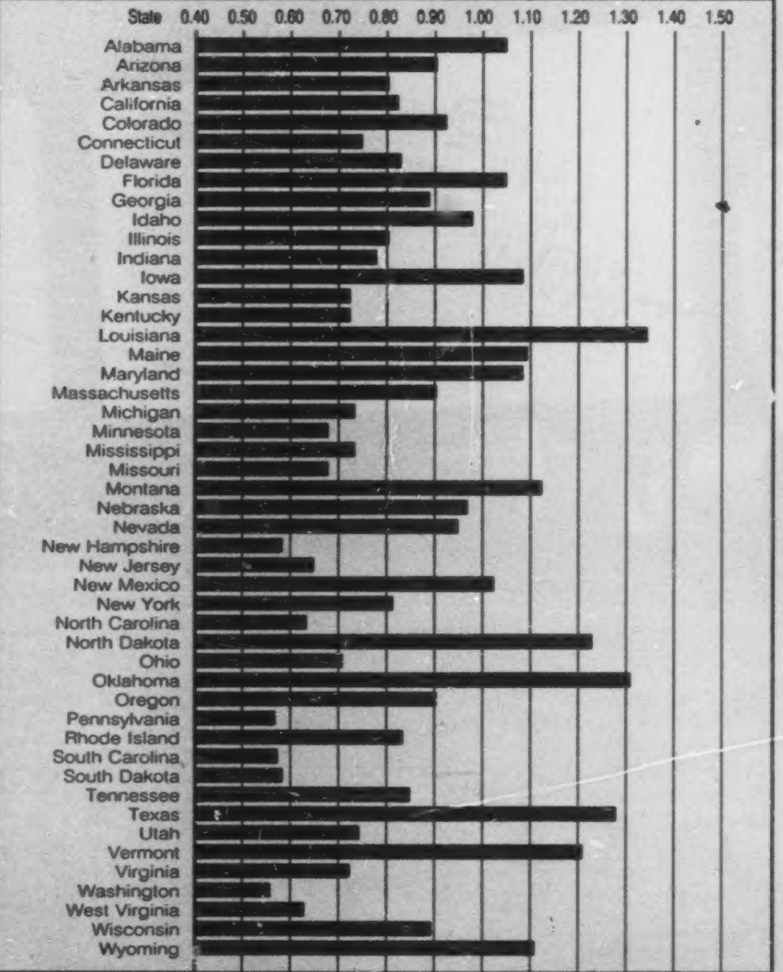
STATE TAX ENVIRONMENTS

STATE AND LOCAL TAX RATES

State	Taxes/ $1,000	% Change	State	Taxes/ $1,000	% Change
Alabama	$ 99.86	1.39%	Nebraska	$110.49	6.51%
Arizona	120.48	4.89	Nevada	111.11	8.26
Arkansas	97.44	4.59	New Hampshire	92.60	6.69
California	115.39	0.41	New Jersey	116.66	4.05
Colorado	106.18	4.13	New Mexico	126.02	−10.11
Connecticut	111.73	9.57	New York	164.61	3.91
Delaware	111.82	3.15	North Carolina	106.37	3.37
Florida	95.08	1.77	North Dakota	115.30	2.58
Georgia	105.32	−0.20	Ohio	111.16	20.79
Idaho	100.99	0.91	Oklahoma	105.68	−4.35
Illinois	113.47	2.71	Oregon	123.54	4.27
Indiana	104.68	13.39	Pennsylvania	114.36	4.70
Iowa	119.13	7.50	Rhode Island	121.03	4.99
Kansas	103.42	3.11	South Carolina	107.92	1.20
Kentucky	101.83	−1.35	South Dakota	100.24	−7.66
Louisiana	109.09	−5.51	Tennessee	92.58	−3.12
Maine	125.91	5.93	Texas	97.07	−3.33
Maryland	116.85	3.99	Utah	128.63	8.19
Massachusetts	117.45	−11.55	Vermont	128.56	2.15
Michigan	137.50	18.86	Virginia	101.44	0.97
Minnesota	143.85	19.92	Washington	117.63	17.10
Mississippi	107.97	0.14	West Virginia	120.70	12.77
Missouri	93.00	6.02	Wisconsin	137.47	12.28
Montana	129.28	0.47	Wyoming	208.89	34.52

STATE AND LOCAL TAX RATES indicates the level of all state and local taxes per $1,000 of personal income. "% Change" indicates the trend in taxation over three years. Several states show decreasing tax levels in recent years, and in one region, the South Central, the rate dropped 2.15 percent. Three of the four states in that region (Louisiana, Oklahoma and Texas) lowered their tax rate during the three-year period. Many of those states taxing above the national average ($115.58) also raised taxes more than the national average over three years, while states taxing below the national average often indicated slower than average growth. Thus the next few years may see the rich get richer, and the poor being taxed even more. Source: General Manufacturing Climates, Grant Thornton.

EXPENDITURES VS. REVENUES



EXPENDITURES VS. REVENUES balances the revenues generated by each state against its expenditures over the course of three years. Results less than 1.00 indicate that state and local governments are generating more income through taxation and other means than is required by their current level of spending. Results over 1.00 represent deficit spending, and the prospect of increasing government debt as a result. Implied in this is the threat of increased taxation to bring revenues in line with current spending levels, or the elimination of government-sponsored programs. Unlike the federal government, most states seem to have their own houses fairly well in order. Thirty-five of the 48 contiguous states are generating more income than they are spending. The results of this comparison appear to be less dependent on regional factors than many of the others examined. Six of the eight regions included at least one state which ranked in the top 10 nationwide, and five of the eight regions were represented in the list of the bottom ten states. However, the average scores for the eight regions vary rather substantially, indicating that, while there are "secure" locations scattered throughout the country, there may be differences which run along regional lines in the readiness to increase debt as a matter of policy. Source: General Manufacturing Climates, Grant Thornton.

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Tales of Trucking Success

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A REAL LAISSEZ-FAIRE ATTITUDE

Asking distribution and transportation managers about the government's role in their industry apparently is like asking grandparents about their grandchildren. Judging from the volume of responses we received, there is no shortage of opinions about Uncle Sam's operating role in entities such as Amtrak, Conrail and the U.S. Postal Service. And it shouldn't take you more than one guess to figure out what the vast majority of our readers said:

"Let each operate on their own with as little government interference as possible—sink or swim!"—**Dick Scott, traffic mgr., NORPAC, Lake Oswego, OR.**

"The government's role should be completely eliminated. The government cannot run a business. They are over budget every year. I wonder how long I could do that and still stay in business?"—**Manny Miyar, general mgr., Kuehne & Nagel Distribution Services, Elk Grove, IL.**

"The merchants will manage commerce the better, the more they are left free to manage for themselves."—**Thomas Jefferson, 1800, as submitted by Michael A. Cook, materials mgr., Frick-Gallagher, Lancaster, OH.**

continued

I would like to see the Postal Service:	
become completely privatized	66%
be forced to privatize in unprofitable areas	19%
continue to make its own privatization choices	13%
I would like to see Amtrak:	
become completely privatized	71%
be forced to privatize in unprofitable areas	13%
continue to make its own privatization choices	16%
I would like to see the federal gov't decrease its support of the shipping industry through subsidies	74%
I would like to see the federal gov't increase financial involvement in highways, airports, ports, etc	50%
Final disposition of the Conrail question should see:	
a sale to Norfolk Southern or other bidder	51%
a public stock sale	47%
a continuation of the status quo	2%
I am opposed to increased user fees	59%

QUESTION OF THE MONTH

A NEW ORDER FOR THE BORDER?

A number of developing trends indicate an upcoming flurry of activity in U.S.-Canadian distribution patterns. First, the general trend toward a "global economy" is expected to receive renewed impetus from U.S. tax reform—which will not retain current incentives for domestic capital expenditures. This is expected to revive interest in offshore manufacturing and distribution facilities—and Canada's prime location and favorable exchange rate make it a good candidate for U.S. capital dollars.

Second, from a transportation standpoint, full-fledged Canadian deregulation (see "Will Canadian Deregulation Work?" Sept. 1986, p. 76) is expected to enhance carrier competition for transborder freight, no matter which side of the line it comes from. The new, relaxed regulatory structure will ease entry requirements and eliminate pricing controls. It may also lead to significant rate discounting.

All of these developments promise to raise some interesting questions in the coming months about U.S.-Canadian trade. We've put some of those questions on the card below, and invite you to provide some of the answers.

DIALOGUE

October 1986

- I expect to be arranging transportation for ______an increased amount/______a decreased amount/______about the same amount of transborder (U.S./Canadian) freight in 1987 as I did in 1986.
- I expect freight rates for transborder traffic to ______increase/______decrease/______stay about the same as a result of Canadian transportation reform.
- I expect to use ______more/______less/______about the same number of carriers for transborder movements in the wake of Canadian transportation reform.
- I expect exchange rate fluctuations in the next two years to prove more advantageous to (check one only) ______U.S.-based carriers/______Canadian carriers in the competition for transborder traffic.
- Canadian locations ______will/______will not become more of an option in the future when my company looks for potential manufacturing, assembly or distribution sites.
- When selecting carriers for transborder freight movements, I am primarily looking for:
  ______single-mode carriers operating out of one country only
  ______single-mode carriers that have operating and interline agreements with a counterpart in the other country
  ______single-mode carriers which own lines in both countries
  multi-modal, multi-national carriers

Here's what I see my company doing in terms of U.S/Canadian transborder manufacturing and distribution for the rest of the 1980s:

____

____

____

____

NAME (print) TITLE

COMPANY PHONE

ADDRESS

CITY STATE ZIP

FIGURES IN SPEECH

(Quotes from transportation and distribution notables that have caught the ears of *DISTRIBUTION* editors:)

"While the world may not be shrinking as fast as some of the more vocal proponents of global marketing would suggest, the challenges of successfully implementing a worldwide marketing strategy are not insurmountable. What is required is a balanced view and approach to what is actionable."—**John G. Main, managing partner, Management Practice Consulting Partners.**

"In light of growing overcapacity in truck building, the trend toward a global economy has brought about a tendency toward cooperation: virtually every major truck manufacturer and OEM parts supplier in America and abroad is connected, joint-ventured or in license agreement with other manufacturers. What we are watching is a form of economic arbitrage on a global scale."—**Peter E. Rupp, president and ceo, Freightliner Corp.**

•

"The bottom line of this tax reform bill is that it will spur demand among consumers, through lower individual tax rates, but those people will be buying more imports."—**Robert Ragland, tax specialist, Nat'l Ass'n of Manufacturers.**

"The government's role should be that of a policeman guarding the welfare of the public, enforcer of laws. In other words, the federal government should GET OUT of the transportation business and STAY OUT of it!"—**T. Earl Van Sickle, Jr., mgr., Super-Exchange, Lehighton, PA.**

"Hands off! Let free enterprise work the way it should—let the users pay for the services."—**Craig Doffing, warehouse mgr., Levi Strauss & Co., Canton, MS.**

"In domestic situations, the government needs to keep its hands off. In international travel—air and steamship—our government needs to help foster development, without owning, to combat the help foreign flag carriers get from their governments."—**Marshall Gordon, controller, Pave Mark Corp., Atlanta, GA.**

"The government's role should be eliminated. If a company can't make it due to poor management it should be closed. The tax-paying public should not have to carry it."—**A.C. Jones, supervisor, shipping/warehouse, Morton-Thiokol, Moss Point, MS.**

"The private sector should operate these entities. If unfavorable conditions exist after a set period, bailout would be permitted."—**John Klosterman, traffic mgr., Navistar, Springfield, OH.**

"I am in favor of subsidization for U.S. flag ocean carriers to maintain a viable maritime fleet. Proposed user fees for U.S. customs entries should be eliminated quickly."—**Martin Christensen, traffic mgr., Silicon Systems, Tustin, CA.**

"The government's operating role should be killed—PRONTO!—**Edwin Boxx, Jr., mgr., Thickwistle & Splash Lines, Minneapolis, MN.**

"The government should have a minimum role. They should use a definite timetable to "withdraw" to give (these entities) an adjustment period—five years at most."—**William Gleaves, purchasing mgr., Borden Chemical, Bellevue, WA.**

"The government should continue to be involved *only* if that involvement is in the best national interest. This involvement would differ depending on the service and availability of alternatives."—**Thomas R. Hart, director, worldwide traffic, Burroughs Corp., Wayne, MI.**

"The government's role should be as an agency of last resort."—**Julio Alvarez, director of transportation, Burdine's, Miami, FL.**

"The government's role should be as a 'Big Brother.' "—**James Hart, traffic, Orchard Supply Hardware, San Jose, CA.**

"The government should get out of the transportation business—lock, stock, barrel and taxes!"—**Russell Roemmele, asst. exec. director, New Jersey Motor Truck Association, East Brunswick, NJ.**

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INDEX SUPPORT IS AVERAGE AT BEST

BY ROBERT J. BOWMAN (415) 752-4884

We love to average things out—wages, company profits, consumer consumption, batting performance, television viewing. Our hero is the Average Guy, an obsession which once prompted Woody Hayes to comment that you can drown in water with an "average" depth of three feet.

What constitutes the "average" private truck fleet? A.T. Kearney, Inc. has been trying to answer that difficult question for six years. In cooperation with the Private Truck Council of America (PTCA), Kearney issues an annual index that purports to show the cost of running a typical private operation. The report is broken down to some extent—separate figures are given for dry van costs versus tank trucks and reefers, union versus non-union—but the intent is to establish a benchmark against which fleets can measure themselves.

This year's index pegs the cost of running an average private fleet at $1.35 per mile, which has caused some fleet managers to sleep easier while giving others the sweats. After all, the index has no real competition. As Kearney's Fred Fukuchi puts it, "It's the *de facto* standard."

Useful or Useless?

Whether the index is of any practical use is another matter. Private fleet managers disagree over its effectiveness in guiding corporate policy, and some fear it obscures the real factors that go into making that ultimate choice between private and for-hire operations.

"We don't use it. I don't even see it," says Don Kitts, transportation manager for West Coast Grocery in Tacoma, Wash. "We have about 20 divisions to compare all over the country, and we keep our own reports that are much more meaningful than the PTCA's."

A subsidiary of Minnesota-based Super Valu Stores, Inc., West Coast Grocery runs its fleet of 73 power units and twice as many trailers at a cost "substantially more" than the index's $1.35 average, Kitts says. Although it's a PTCA member, the company believes "it isn't important to compare ourselves with somebody that isn't doing the same thing we are," he adds.

Herman Granberry, vice president and general manager of West Point Pepperell's transportation division, says the index "isn't definitive enough." The Georgia textile manufacturer, with a fleet of more than 750 vehicles, has three brackets for calculating costs: teams of drivers running linehaul cross-country; singles staying within 250 miles of the terminal; and locals who rarely venture farther than 20 miles. The longer the haul, the lower the per-mile cost.

PRIVATE THOUGHTS

If you didn't hear, and there's still time, be advised that the **Private Carrier Conference** *made a change of dates for its annual meeting to October 6 and 7, at the Fairmont Hotel in New Orleans. Speakers at the conference will include Philip W. Hasseltine of the U.S. Department of Transportation, and Neil A. Springer, president and ceo of Navistar International Corp. In addition, workshop sessions will include: "Handling Exempt Commodities for Profit"; "Alcohol and Drug Abuse"; "The Impact of the New Tax Code on You and Your Private Fleet"; "Just-in-Time: Does It Give Private Fleets an Advantage?"; "Private Carrier-to-Private Carrier Trip Leasing: The Elimination of the 30-Day Rule"; "Dedicated Contract Carriage"; "Artificial Intelligence: Computers Go Beyond Crunching Numbers"; "Equipment Leasing: The Shape of Things to Come"; and "Satallite Determination Systems."*

Write In 419 on Reader Service Card

•

Due to an increase in customer demand, **Coors Transportation Co.** *has established a service center in the Louisville, Ky. area. Director Ed Cox explains that the center will serve the Midwest and Eastern regions, as well as the local Louisville area.*

Write In 418 on Reader Service Card

Kearney's raw data presents another potential problem. Granberry says that "most private carriers don't know or don't count all their operation expenses, such as administration, personnel management and safety programs."

West Point Pepperell, affiliated with the Private Carrier Conference, has an average fleet cost of about $1 per mile, says Granberry. "We've got to stay in that range to stay in business," he adds.

Another PCC-affiliated private fleet manager, who requested anonymity, agrees. He runs a fleet of 19 tractors and 42 trailers, putting 200,000 miles on each vehicle per year. "Anybody who's running around in 1986 at $1.35 per mile in a dry van operation is either kidding himself or kidding his management," he feels. "My costs are $1.12." (Actually, Kearney puts the dry van average at $1.24).

This manager is also concerned about the accuracy of Kearney's data, but in a different way. "What I would investigate is whether or not the individual inputs aren't inflated just so somebody can take that report to his management and say, 'Look what a wonderful job I've done,' " he says.

The real benchmark, says this fleet manager, ought to be how private fleet costs compare with the best for-hire rate available in any mode. "I'm up against the lowest guy on the street," he notes. "That's my monthly report card."

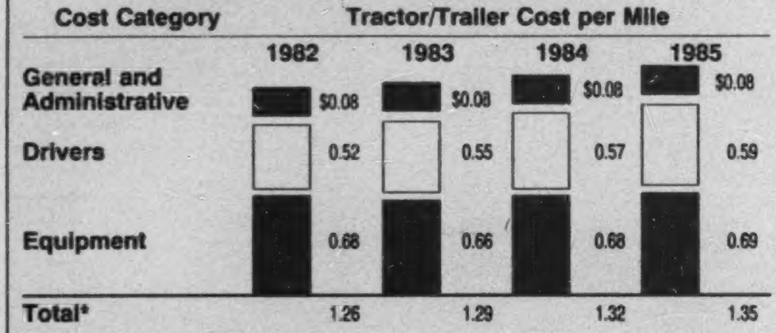
continued

R&G Sloane Manufacturing Co., Inc., the Sun Valley, Calif. maker of plastic fittings, uses the index to gauge the effectiveness of its intrastate fleet. National Traffic Manager Jerome J. Wolf says the PTCA member's seven power units and 13 trailers operate at $1.28 per mile, on short runs. "I find it's a useful tool," he adds. "We can live without it, but we're interested in how we compare."

Comparing Apples With Apples

PTCA President Jack H. Meyers defends the cost index, noting that Kearney offers specialized data runs (at additional charge) tailored to individual situations. His firm, Central Soya Co., Inc., Fort Wayne, Ind., uses the supplementary service to compare itself with other private haulers in the animal and poultry feed business.

COST PER MILE TRENDS – PRIVATE FLEET COST INDEX



**Numbers may not add; they represent average costs for those companies that provided information to the PTCA/Kearney annual Private Fleet Cost Index.*

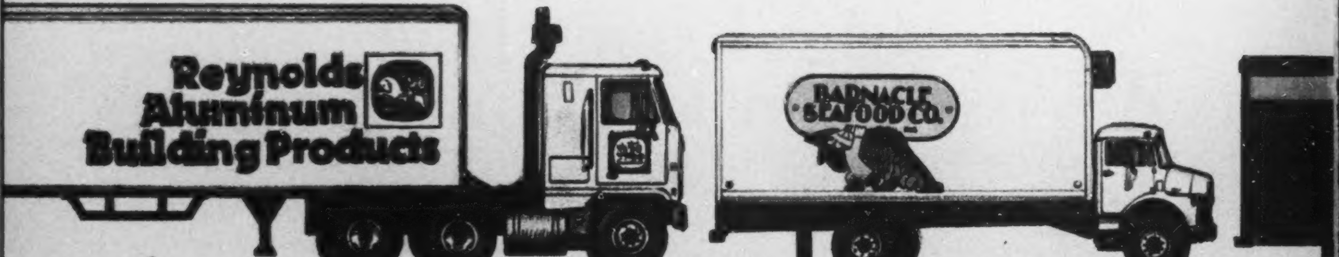
Is the PTCA/A.T. Kearney index a practical reflection of trucking costs, or just an interesting numbers game?

Even so, Central Soya's fleet of 175 tractors and 250 trailers doesn't comfortably fit the Kearney profile. Its costs range from $1 a mile to $1.60, with equipment utilization as low as 40,000 miles per year and as high as 125,000. Meyers says the disparities stem from regional differences in wages and terminal hours.

According to Kearney associate Karen Arsenault, the database includes as many variables as possible and factors them into the specialized runs. "If we included every specific situation in the main report, it would be hundreds of pages long," she says. "So we covered the most requested averages."

Arsenault downplays potential inputting problems. The survey carefully specifies all fleet costs to be included, while others are deliberately excluded. "We choose only

ALL ACROSS AMERICA, ALL KINDS OF COMPANIES ARE MAKING THE RIGHT MOVE WITH RYDER.



From nationwide air freight to local lobsters, daily newspapers to building products, the companies America depends on have come to depend on Ryder. For some very good reasons: **RELIABILITY** Your customers expect it, and we help you deliver it. Every Ryder vehicle is specified to exacting standards, and backed by the industry's most extensive preventive maintenance and safety programs. **FLEXIBILITY** We can supply you with one truck for a rush delivery. A fleet to help you expand your business. A total transportation system that includes design, management, vehicles and labor. Or almost anything in between.

those strict operating costs which are needed to make the wheels turn and deliver the freight," Arsenault says. "That allows us to compare apples and apples."

As for the chance that participating fleets will deliberately inflate their costs, Arsenault stresses that Kearney's computer is designed to highlight discrepancies. The firm interviews each company personally, providing ample opportunity for corrections. She adds that many respondents submit year-to-date figures drawn straight from their accounting departments.

Private Carrier, Know Thyself

There is at least one alternative to the Kearney index. Peat, Marwick & Mitchell offers a computerized costing model tailored to private fleets. Richard Ross, national director of motor carrier consulting, says the company's database "allows you to compare yourself with an average carrier given certain operational parameters – geography, union or non-union, payload, equipment, own versus lease, one-way linehaul loaded miles."

Employing up to 133 variables, Peat Marwick's model lets companies compare their fleets in three ways: with the industry as a whole, against the company's own standards, and against an actual trip. What's more, year-to-year costs are restated in equal dollars, avoiding confusion over inflation rates.

"We wind up with a required cash flow that those assets would be required to generate," says Ross. At the same time, he isn't critical of the Kearney approach. "I don't discount what they're doing. It's a reasonable approach to the mass handling of data."

Most companies agree that the Kearney cost index is useful to a point. But they add that the notion of creating an "average" private trucker, or of pitting one fleet against another, has its limits. "We only compete against ourselves," says West Coast Grocery's Don Kitts – suggesting that while averages are instructive, the best source for comparison lies in your own backyard. ◻

PRIVATE FLEET OPERATING STATISTICS

Description	1984	1985
Miles driven	1,496 million	1,463 million
Avg. miles per trip	921	911
Number of drivers	21,971	20,882
Miles per driver	78,600	79,100
Number of tractors	16,366	15,067
Avg. miles per tractor	100,600	101,900
Avg. Tractor age	3 years	3 years
Avg. tractor mpg	5.5	5.6

The PTCA Index factors out specific components of private fleet operations, but some question the value of averages of any kind.

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